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20–24 June 2015, Madrid, Spain

Supplement edited by Programme Committee chaired by Ruud Minderaa, Josefina Castro-Fornieles and Stephan Eliez

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SATURDAY

A1-01

Terapia grupal de regulación emocional e interpersonal para testigos de violencia doméstica

Alvarez-segura M; Lacasa Saludas F; Navarro León M; Ortiz Jiménez E

Hospital Sant Joan De Deu

Centre de Salut Mental Infanto Juvenil de Cornellà (Barcelona)
Hospital Sant Joan de Déu de Barcelona

Violencia, terapia grupal, regulación emocional.

En un estudio reciente se observó que el 19% de los niños y adolescentes atendidos en los Centros de Salud Mental Infanto-Juvenil (CSMIJ) de Barcelona declararon haber sido testigos de violencia doméstica. El 63% de estos pacientes tienen peor salud mental, más problemas sociales y menos habilidades de resolución de conflictos, así como mayor probabilidad de ser víctimas de bullying y de aislamiento. Ser testigo de violencia en la infancia incrementa el riesgo de ser maltratador en la edad adulta, de ser víctima doméstica y de maltratar a los propios hijos en el futuro. Ante esta realidad, en el CSMIJ Sant Joan de Déu en Cornellà, se creó en el año 2005 el Programa de Atención a los Testigos de Violencia Doméstica, llamado TEVÍ (te-ví), para subrayar el hecho de que los niños sí que se percatan de la violencia, aunque no hablen espontáneamente de ella.

Dentro de este programa TEVI se ha desarrollado una terapia grupal específica para estos pacientes llamada TREI "Tratamiento de Regulación Emocional e Interpersonal". Se trata de un tratamiento grupal semiestructurado. En el año 2014 se ha publicado el manual de la terapia TREI. Consta de 12 sesiones de 75 minutos de duración cada una. Existe una versión para niños (8-11 años) y otra para adolescentes (12-16 años). Esta intervención está basada en la terapia original "Skills Training in Affective and Interpersonal Regulation" (STAIR), desarrollada inicialmente para el tratamiento de adultos víctimas de abusos en la infancia por parte del cuidador principal.

El taller pretende ser un espacio de formación de la terapia TREI llevada a cabo con pacientes con antecedentes de trauma. Aunque un formato que puede aplicarse a cualquier paciente cuyo problema fundamental sea la regulación emocional. El taller consta de tres partes en las que se usará casos prácticos de nuestra experiencia clínica. Se mostrará el material usado para la detección de la violencia doméstica y para el tratamiento grupal así como videos de algunas sesiones de grupo y valoraciones individuales. Las partes del taller serán:

1. Una introducción a la realidad de la violencia doméstica y trauma en la población infantil (15 minutos).

2. Exposición de la terapia TREI dentro del programa marco (TEVI) que implica un trabajo en red (15 minutos).

3. Una muestra de las distintas sesiones de la terapia grupal haciendo hincapié en aspectos psicoterapéuticos esenciales de cada sesión (1 hora).

A1-02

Treating ambiguity and ambivalence: innovative strategies for adolescents with severe and treatment-resistant mental illness

Harding D; Feijo I; Nielsen F

Concord Hospital

Rationale: Treatment resistance in severe child and adolescent mental illness poses significant prognostic concerns related to severity and chronicity, as well as the broader family and social implications.

The Walker Adolescent High Severity Psychiatric Unit in Sydney Australia was established in 2009 for young people aged between 12 and 18 who are experiencing the most extreme forms of mental illness who have not responded to standard treatments at other inpatient units. For these most vulnerable and severely unwell patients, other psychotherapeutic models and interventions are needed, as no one model or treatment protocol is 'good enough' as a stand-alone intervention.

The ambiguity and developmental trajectories associated with severe and unremitting adolescent mental illness involves complex diagnostic issues. This often results in inconsistent (or even 'scattergun') approaches to the prescription of pharmacological and psychotherapeutic interventions between treating clinicians and facilities, much of which is 'off-label' (Ali & Ajmal, 2012).

Despite this history of treatment uncertainty, there is emerging evidence for three unifying components in evidence-based psychotherapeutic treatments including (1) challenging maladaptive cognitive appraisals (2) managing behaviours associated with disordered emotions and (3) preventing emotional avoidance (Barlow, 2013). Nevertheless, uncertainty remains about their implementation in the face of symptom-related patient ambivalence.

Workshop

Structure: This workshop introduces an innovative approach developed at the Walker Unit that integrates pharmacological and different psychotherapies when working with treatment-resistant adolescents (Harding et al, 2014). In particular, the workshop will be in two parts. First there will be an interactive presentation and discussion of (1) an over-arching collaborative treatment model (2) recommendations for prescribing psychotropic medications (3) a model for the innovative use of both verbal and non-verbal psychotherapeutic techniques. The second part of the workshop will involve all participants having a practical 'hands-on' experience, through demonstrations and role-plays, of the innovative and integrated use of verbal (e.g. CBT,

Family Therapy) and non-verbal psychotherapies (e.g. Art Therapy, Music Therapy).

Workshop

Outcomes: On completion of this interactive workshop participants will have: (1) an understanding of the theoretical underpinnings of the innovative and unifying use of evidence-based psychotherapeutic techniques, (2) a practical ‘hands-on’ experience of using this approach (3) opportunities to discuss how this model and techniques may be used in their own work.

Workshop

References:

Ali, S., Ajmal, S (2012) When is off-label prescribing appropriate? *Current Psychiatry*, 11 (7).

Barlow, D. H., Bullis, J. R., Comer, J. S., & Ametaj, A. A. (2013). Evidence-based psychological treatments: An update and a way forward. In S. Nolen-Hoeksema, T.D. Cannon, & T. Widiger (Eds.), *Annual Review of Clinical Psychology* (Vol. 9, pp.1-27). Palo Alto, CA: Annual Reviews.

Harding, D. W et al (2014). Innovative strategies for adolescents with ‘treatment resistant’ psychiatric conditions. Paper presented at the Conference of International Academy of Child and Adolescent Psychiatry and Allied Professions (IACAPAP), Durban, South Africa.

A1-03

Odd gait, clumsiness, and other abnormal motor signs: clinical insights from the Australian autism motor research program.

Rinehart N; McGinley J; Murphy A; Enticott P

Deakin University; The University Of Melbourne; Monash Health

‘Odd gait, clumsiness, and other abnormal motor signs’: Clinical insights from the Australian Autism Motor Research Program.

ASD affects around 1% of the population and is characterised by life-long social, communicative, and behavioural deficits. There is increasing agreement in the literature that motor impairment may also be a core clinical symptom of ASD. While ASD genetics and imaging research are progressing, there have been few breakthrough discoveries and none that have resulted in a biomarker or an improved objective diagnostic measure. In contrast, over the last decade there has been growing consensus in the literature that the motor symptoms of ASD show promise as a potential biomarker and in the future may be used as an adjunct to the clinical diagnosis and phenotyping of ASD. Further, there is evidence that gait and motor disturbance may be present in young children with ASD prior to social and language difficulties becoming clinically apparent. Over the last decade, the Australian Autism Motor Research group has employed a range of neuromotor technologies to further develop our understanding of the motor profile of children with autism, Asperger’s disorder, and Attention Deficit Hyperactivity Disorder (ADHD). Using novel neuromotor research technologies such as Three-Dimensional Motion Capture and Touchscreen kinematics measures, our research group has reported on distinct clinical movement and gait profiles that appear to distinguish children with autism, Asperger’s disorder, and ADHD (e.g., Dowd et al., 2012, Johnson et al., In Press, Johnson et al., 2013a-b, Langmaid et al., 2012, Langmaid et al., 2013, Nayate et al., 2012, Papadopoulos et al., 2011, Papadopoulos et al., 2012a/b, Papadopoulos et al., 2013, Rinehart et al., 2006a-c).

The aim of this workshop will be to provide delegates with clinical examples of DSM-5 ‘Associated Features Supporting

Diagnosis’ of ASD ‘including odd gait, clumsiness, and other abnormal motor signs (e.g., walking on tiptoes)’ (APA, 2013, p. 55) in the context of typical motor development trajectories. The workshop will present key data from our 10-year program of clinical research and multidisciplinary expertise from speakers representing the fields of Clinical Psychology, Biomechanics, and Physiotherapy. The workshop will invite an interactive discussion that compares and contrasts the different manifestations of gait and motor function in children with neurodevelopmental disorders. Finally, the workshop will consider the clinical implications associated with motor impairments in children with neurodevelopmental disorders by considering the impact on everyday activities and participation using the International Classification of Function (ICF) framework.

A1-04

Parentified children of divorcing parents

Palyo S; Belkin B; Long K

New York Medical College; Weill Cornell Medical Center; Institute For Expressive Analysis

Children whose parents are divorcing take on adult responsibilities in order to maintain a semblance of their former family structure. Treatments tend to focus on allowing a child to continue to develop at his or her age appropriate rate and alleviate the burden of adult responsibilities that has been placed on the child by a parent or even by the child him or herself. However, there are instances where the adults are unable to resume the responsibility of being a parent. This prevents the child from giving up their internal parental role. The workshop explores this process through case studies, a film excerpt, and discussion.

Dr. Palyo and Ms. Long will discuss two of their collaborations with families who have divorced and then these situations will be discussed and compared with the film, *What Maisie Knew*. Case 1 explores a teenage daughter who aligns herself with the less emotionally functional parent and opposes the other parent who seeks change. Through parent involvement with therapy, adolescent development and the finalization of the divorce, the teenager is able to grow and let go parts of her parentified-self. Case 2 illustrates a case where the school age child must remain in charge in both of her home’s given her father’s alcoholic fuelled violent outbursts and her mother’s inability to manage simple tasks. As therapy progresses, but without any shift by the parents, she must hold onto this burdensome role.

The film, *What Maisie Knew*, is a 2013 contemporary film adaptation of Henry James’ 1897 novel about a child caught between two wretchedly selfish people embroiled in a messy divorce and custody dispute. Dr. Belkin will provide an introduction to the film and highlight the work of Judith Wallerstein, PhD with families who have a divorce. The film provides a view into a child’s understanding of the adults in charge of her and reveals the emotional impact of divorce and custody disputes on child development, emphasizing that children often see much more than they understand.

The cases and film serve as a springboard for discussions about loss of innocence, the nature of resilience, and the impact of bitter custody disputes on child emotional and mental health. It is advisable to watch the film prior to as only clips will be shown.

Time: 30 minutes both cases; 30 minutes film intro and film, 30 minutes discussion

Keywords: divorce, family, film

A1-05**Cultivating wise mind: an introduction to dialectical behavior therapy with adolescents***Sung S; Peh S*

Duke-nus Graduate Medical School Singapore & Institute Of Mental Health, Singapore; Institute Of Mental Health, Singapore

Cultivating Wise Mind: An Introduction to Dialectical Behavior Therapy with Adolescents

Dialectical Behavior Therapy (DBT) is an evidence-based psychotherapy that was originally developed by Dr Marsha Linehan to treat adults with borderline personality disorder (Linehan, 1993). DBT blends change-oriented techniques from cognitive behavioral therapy with acceptance-based strategies from Zen mindfulness practice. Because symptoms of borderline personality disorder typically begin during adolescence or early-adulthood, more recent work has adapted the original DBT framework for treating adolescents and their family members (Miller, Rathus, & Linehan, 2006). DBT for adolescents is a multi-component treatment that consists of individual therapy, group skills training for adolescents and caregivers, skills coaching, and a therapist consultation team. It is designed to help teens who have difficulties regulating their emotions and behaviour, and aims to help teens and their families gain insight into the teens' difficulties and help teens learn skills to better manage their thoughts, emotions and behaviors, so that they can build a meaningful life for themselves that is worth living. The proposed workshop will introduce attendees to the DBT approach for treating adolescents with problems such as suicidal and self-injurious behavior, interpersonal difficulties, and pervasive problems with emotion regulation. The presenters will provide an overview of the DBT model and will share their experience implementing DBT in a tertiary psychiatric clinic in Singapore as well as their preliminary research findings. Participants will learn the basic elements of DBT case formulation using bio-social theory. Experiential exercises consisting of hands-on, engaging, and interactive activities will also be used to illustrate DBT concepts such as mindfulness, distress tolerance, emotion regulation, interpersonal effectiveness, and walking the middle path.

A1-06**Psychosocial functioning of Syrian child refugees in Jordan and Turkey***Jefee-bahloul H; Cohen S; Bitar A; Kairuz C; Terepka, A; Kanawati Y; Barkil-oteo A; Ozlem Kutuk M; Hamoda H*

Yale University; Yale University School Of Medicine; Syrian American Medical Society; Icahn School Of Medicine At Mount Sinai; Indiana University Of Pennsylvania; Yale University School Of Medicine; Malatya State Hospital; Harvard Medical School

Retrospective Effectiveness Analysis of Art-therapy Course used in Treatment of Syrian Refugee Children (REAACT)

Hussam Jefee-Bahloul, MD1, Stephanie C. Cohen, BA5 Alaa Bitar, BA4 Clement Kairuz, MPH2, Angela Terepka, MA3, Yassar Kanawati, MD 4, Hesham M Hamoda, MD, MPH6, Andres Barkil-Oteo, MD, MSc1

Background: There is a growing need to evaluate mental health interventions and their effectiveness in children surviving war. One group of mental health providers analyzed clinical data on Syrian

children living in a group home before and after implementing an art therapy module.

Aims: To provide retrospective effectiveness analysis for this clinical intervention.

Methods: The following data was collected for children: Children's Impact of Event Scale CRIES-8, Depression self-rating Scale of Children, and Strength and Difficulties scale. The data is available for 48 children prior to and after involvement in 16 sessions of art therapy divided into 4 individual sessions and 12 group sessions.

Results: Children whose original scores were above the cut-off no longer met threshold following the intervention. Additionally, T-test showed that group scores significantly decreased pre-test to post test for each of the three scales CRIES-8 (M= 14.94, SD= 4.29 pre-test, to M=5.29, SD=2.33 post-test), Depression Self-Rating Scale of Children (M= 16.31, SD= 3.45 pre-test to; M=11.65, SD=1.60 post-test), and strengths and difficulties scale (M=17.19, SD= 3.05 pre-test, to M=13.15, SD= 1.63 post-test). T-test for all these comparisons produced $p < .001$.

Conclusions: Although there are limitations to this retrospective analysis, our study shows that art therapy may be an effective tool in mental health management of refugee children who have experienced war trauma.

Syrian Child Brides in Turkey

Meryem Ozlem Kutuk, MD; Fatma Celik, BS.

Baskent University School of Medicine, Dept. of Child and Adolescent Psychiatry, Adana, Turkey.

Objective: Our study aimed to evaluate the sociodemographic variables of child brides and their children and also do their psychiatric evaluations in a refugee camp in Turkey.

Methods: 45-60 minute-long clinical psychiatric interviews were done with 54 girls and their children by a child and adolescent psychiatrist. DSM-IV-TR criteria were used for the diagnosis of mental disorders among child brides and their children.

Results: The study included 54 Syrian child brides and 33 children of them, who live in the container city. According to psychiatric evaluation, 27 girls had PTSD, and also 4 girls had learning disabilities that had also been diagnosed in Syria. One child was diagnosed with posttraumatic stress disorder, one child was diagnosed with attention deficit and hyperactivity disorder. According to Denver screening test, 1 child had delay in speech development, 5 children had delays in both motor development and speech.

Conclusions: Child marriage is a violation of human rights. Currently, over 60 million women and girls worldwide are affected by child marriages. Prevention of child marriages is vitally important and education is one of the key approaches.

A2-01**Adaptandp la terapia dialéctico conductual para adolescentes suicidas en la atención ambulatoria regular***Méndez Blanco I; Mayoral Aragón M; Fernández Rivas M*

Hospital Clinic I Provincial De Barcelona; Hospital General Universitario Gregorio Marañón. Centro De Investigación Biomedica En Red De Salud Mental (cibersam); Hospital Universitario De Basurto

Overview:

The number of Suicidal and Para-suicidal events in youth has substantially increased in the last decade all over Europe for a number of reasons. Nowadays, the estimated suicide rate is around 4-6 deaths/

100,000, becoming the second leading cause of death among 15–19 years old¹. Besides, one fourth of our teenagers are involved in irregular self-cutting and other self-injury behaviors, 7% of cases in a severe range with the ulterior risk of a suicide attempt².

Dialectical Behavioral Therapy, initially developed for adult Borderline Personality disorders by M. Linehan³, has recently been proved to be an effective treatment for adolescents engaged in suicidal behaviors^{4,5}. Unfortunately, it is only available in few clinical centers in Spain.

Therefore, the aim of this workshop will be the presentation and dissemination of this novel therapeutic tool for Suicidal youths. First, we will summarize the theoretical framework of DBT, and introduce the four main components of therapy (individual therapy, group therapy, coaching by phone and therapy for therapists). Following, we will conduct a more extended practical presentation of each one, using clinical examples from our daily work, as well as material specifically developed and adapted for our sessions (hand-outs, mood diaries, diagrams, etc.). The workshop will be presented in Spanish.

Title of each lecture:

Part 1: Introduction to DBT, Who is going to succeed? How do I structure the individual therapy sessions?

Part 2: Skills training modules in Multifamily Therapy Groups. Could I deliver it at my center?

Part 3: Therapy for Therapist and Coaching by telephone. How do I manage in a crisis situation?

Discussion: 30 min.

¹ Preventing Suicide. A global imperative. WHO, 2014.

² Brunner R., Kaess M., Parzer P. et al. Life-time prevalence and psychosocial correlates of adolescent direct self-injurious behavior: A comparative study of findings in 11 European countries. *J Child Psychol Psychiatry*, 2014 Apr; 55(4).

³ Linehan MM. *Skills Training Manual for Treating Borderline Personality Disorder*. New York: Guilford; 1993.

⁴ Miller AL, Rathus JH, Linehan MM. *Dialectical Behavior Therapy With Suicidal Adolescents*. New York: Guilford; 2006.

⁵ Goldstein TR, Axelson DA, Birmaher B, Brent DA. Dialectical Behavior Therapy for Adolescents With Bipolar Disorder: A 1-Year Open Trial. *Journal of the American Academy of Child & Adolescent Psychiatry* 2007;46(7):820–30.

A2-02

The dialogue model: using a visualized dialogue to create connection and cooperation

Westermann G; Maurer J

Orbis Medical Centre

According to a new controversial Youth Law in the Netherlands transition and transformation of youth care, including child and adolescent psychiatry, have been initiated since 2015 January the first. Apart from other purposes, such as financial savings, a central aim of this drastic move is to accomplish more integrated care for families in need of help. Quite often several organizations are involved in helping families and frequently more attention is paid to difficulties involved and less to strengths within the families and their close relatives.

The Dialogue Model is developed to enhance connection and cooperation between families and professionals and interconnected-coordination of professionals as well. Informed consent, empowerment and shared decision-making are the key words that characterize the Dialogue Model. Using this method we aim at partnership, joint evaluation and agreement with families. It also

helps them to acquire a hopeful overview of their strengths and difficulties and stimulates a trustful working alliance. In dialogue with families we talk about what helps or hinders them here-and-now, and how we (and other professionals) can help them to achieve a new balance so that they can master their situation again. Through dialogue in plain words, an understandable and manageable narrative is created, combining on the one hand professional reflections and findings, and on the other hand beliefs, views and needs of the patients system. An image serves as a graphic interface to stimulate the two-way flow of information. As shown in many studies, visualization stimulates cohesive integration of the information and creativeness of all participants.

The Dialogue Model enables to reflect on treatment options on a physical, psychological, behavioural and environmental level, to weigh the pros and cons and to share decisions in reaching agreement upon a treatment plan. In our experience the dialogical attitude and the visualization energize and help children and parents to feel less ashamed or guilty, and more hopeful. The method also helps them to engage in psychological or psychiatric treatment. The Dialogue Model has been studied in a RCT as part of a structured counselling procedure in youth mental health care in the Netherlands and proved to be beneficial to all participants. It's now being used in several Dutch and Belgian youth mental care organizations. We will introduce the Dialogue Model, present our findings and share common experiences with our colleagues in a dialogical way.

Keywords: dialogue, shared decision-making, visualization

A2-03

Pathways of care: pilot-evaluation of an on-line resource for early childhood and mental health service providers

Laletas S; Reupert A; Goodyear M; Morgan B

Monash University, Australia; The Children Of Parents With A Mental Illness (copmi) National Initiative, Australia

Abstract

Background: Many people with a mental illness have young children. Research has shown that early childhood is a particularly vulnerable time for children whose parents have a mental illness. Moreover, repeated research has demonstrated the effectiveness of a multi-agency approach to family focused practice for improving parental functioning and preventing adverse outcomes in children whose parents have a mental illness, particularly in the early years of a child's life. However, there is a paucity of professional development resources for professionals who work with families where a parent has a mental illness and has young children.

Significance of the study: This study will make a contribution to addressing knowledge gaps around resource development and workforce needs for early childhood and mental health professionals working with young children where a parent has a mental illness.

Objective: This presentation describes a newly developed resource, 'Pathways of Care', specifically designed for early childhood educators and mental health workers, alongside pilot evaluation data regarding its effectiveness. 'Pathways of Care' aims to promote collaborative practice and present early identification and referral processes for workers in this sector. The resource was developed by the Children of Parents with a Mental Illness (COPMI) National Initiative which is funded by the Australian Government.

Method: Using a mixed method design, the effectiveness of the training resource is also presented. Fifteen workers completed the Family Focus Mental Health Practice Questionnaire (Maybery et al.,

2012) pre and post using the resource, to measure confidence and practice change; semi-structured interviews were also conducted with eight of these same workers to further explore the utility of the resource.

Findings: The findings indicated the resource was effective in increasing knowledge and confidence, particularly for new and/or inexperienced staff. Examples of how the resource was used in practice by various professions emerged from the interview data.

Conclusions: Collaborative practice, early identification and intervention in early childhood can potentially play a key role in altering the life trajectory of children who are at risk. This information has important implications for workforce development and staff training in both the early childhood and mental health sectors. Implications for policy and future research are discussed.

A2-04

Actividades no sanitarias en el tratamiento de menores con trastorno mental grave. ¿qué aporta un modelo integrador?

Moreno Pardillo D; Vicente Lorenzo C; García-valdés Y De Yrizar P; Álvaro Campos J; Muñoz Garrido V; González Serrano M; Cobos Medina M

Hospital General Universitario Gregorio Marañón; Fundación Curarte, Fundación Esther Koplowitz, Constructora Fcc, Stone Designs Y Boamistura Muralistas; Fundación Abracadabra De Magos Solidarios; Sociedad De Pediatría De Madrid Y Castilla La Mancha.; Fundación Nfoque

Introducción

¿Por qué no facilitar la activación emocional en los menores con trastorno mental grave utilizando un modelo integrador con actividades no sanitarias que refuercen las actuaciones sanitarias? En la Unidad de Adolescentes del Hospital Gregorio Marañón de Madrid hemos interrelacionado a diversos profesionales, técnicas terapéuticas y se ha habilitado un Espacio Integrador. Nuestros objetivos son mejorar el entorno en la atención a los menores con trastorno mental grave, fomentar una relación de confianza del menor hacia los profesionales, promover cambios psicológicos progresivos dentro de una relación terapéutica, proporcionar a los menores una respuesta educativa adecuada a sus necesidades y potenciar el desarrollo de habilidades.

Método

Participan los adolescentes ingresados. Para que el cambio sea efectivo necesitan activarse las emociones relacionadas con las dificultades que el menor tiene, ya que a menudo éstas se procesan a este nivel, desarrollando varias actividades: Arteterapia, Taller de Magia, Intervención educativa y una Terraza.

Resultados

La nueva Terraza es un espacio al aire libre, donde se realizan actividades físicas y disfrutan con juegos disminuyendo el estrés ambiental. En los Talleres de Magia los menores refieren sentirse más tranquilos y optimistas, mejoran su expresión y manejo de las emociones. El Arteterapia mejora la introspección acerca de sus dificultades psicosociales. Disminuye su nivel de ansiedad y aporta información clínicamente revelante. La Actividad Docente favorece el autocontrol en su incorporación a la vida escolar.

Conclusiones

Con la integración de profesionales no sanitarios se ha conseguido una relación de confianza con el menor en una atmósfera de aceptación, sin ser criticado y ha facilitado reintegrarse lo más rápidamente posible a su medio habitual. El Arteterapia les facilita la expresión emocional a través de su obra y les ayuda a poder expresar este

proceso verbalmente. La representación simbólica abre un camino de introspección que les ayuda a afrontar mejor la enfermedad. Los Talleres de Magia facilitan la labor asistencial, mejoran a corto plazo el estado emocional, autoestima y las relaciones con los demás de los participantes. La encuesta de satisfacción cumplimentada por el menor al finalizar la hospitalización, recoge un alto grado de satisfacción con la Atención Educativa recibida. La nueva Terraza influye no sólo en el estado de ánimo de los pacientes, sino también en su recuperación. Consideramos que es importante incluir un modelo integrador en las unidades de psiquiatría.

A2-05

Aspectos éticos en la atención al niño y adolescentes

Gabalón S; Picouto D; Esquerda M

Hospital Infantil Sant Joan De Deu, Esplugues; Sant Joan De Deu / institut Borja Bioética

La atención sanitaria a los pacientes menores de edad ha sufrido un profundo cambio desde la segunda mitad del siglo XX, no solo en el campo de avances científico-técnicos sino también en aspectos ético-legales.

Por una parte, los grandes avances científico-técnicos nos sitúan ante un panorama en la que las posibles opciones se multiplican, tanto opciones diagnósticas como terapéuticas, disponiendo pues de una multiplicidad de posibilidades. Por otra parte, las familias y los pacientes se sitúan como agentes activos, en el proceso de toma de decisiones sanitarias y ello supone otro cambio, revolucionario, en el ejercicio de la profesión.

En el ámbito infanto-juvenil, la complejidad es aún mayor pues el proceso de promoción y reconocimiento de la autonomía del paciente se desarrolla de una forma doble: por una parte la consideración de las familias como implicadas en el proceso de toma de decisiones, y por otra parte el progresivo reconocimiento de los derechos de los menores.

En Salud mental, este cambio de paradigma repercute de forma directa en la asistencia a niños, adolescentes y sus familias.

Este taller pretende profundizar en aspectos éticos como son el manejo de la información, la confidencialidad o aspectos éticos relacionados con los servicios de urgencias y la hospitalización en psiquiatría infanto-juvenil. El taller consta de 3 intervenciones

- Confidencialidad en el ámbito de la salud mental. Aspectos éticos en la confidencialidad en adicciones en el adolescente. Sabel Gabalón, psiquiatra, Hospital Infantil Sant Joan de Déu Esplugues

- Aspectos éticos en urgencias y hospitalización en psiquiatría infanto-juvenil. Dra Lola Picouto, psiquiatra, Hospital Infantil Sant Joan de Déu Esplugues

- Información en el ámbito de la salud mental: ¿cuánta información y cómo?, ¿debemos informar solo a los padres o también a los niños? ¿Aspectos de la información en los fármacos off-label? Dra Montse Esquerda, pediatra, CSMIj Sant Joan de Déu lleida, Institut Borja Bioética

A3-01

Destigmatisation

Van Der Meer J

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Keywords: Destigmatisation, stigma, mental health care

Destigmatisation

Given both the Dutch National Conference entitled ‘Thinking differently about psychiatric disorders’ organised in autumn 2014, and the shift in the Dutch youth health care system towards ‘demedicalisation’ and ‘empowerment’ from January 2015 on, one may suggest that policy makers and politicians in the Netherlands have made some progress in reducing the associations of shame and disgrace from mental illnesses. However, there is still much work to be done to ban discrimination and prejudice from society. Recently launched campaigns are for example focused on work reintegration (collegasmet karakter.nl) and on providing unaffected people with more information on psychiatric disorders (dehulplijnvoormensenzonderpsychischeziekte.nl).

To develop an effective social destigmatisation programme, one should have clear ideas about the benefits of a stigmatising attitude. Research suggests that stigmatisation involves self-sheltering and self-seeking behaviour. That is, it may be a protective device for the stigmatiser. The stigmatiser, on each occasion of avoiding the stigmatised, may draw primary gain from reducing his or her anxiety and is thus powerfully reinforced (Haghighat, 2001). How can this insight lead to societal benefits? How can clinicians and policy-makers employ research insights when promoting destigmatisation? What role should clinical practitioners play in destigmatisation? What can you do?

References

Haghighat R. (2001). *The British Journal of Psychiatry*, 178: 207–215

Of note. Since workshops should last 90 minutes and include 2 or 3 speakers, I would be very pleased to be part of a workshop composed by the programme committee.

A3-02

Integrating child psychiatry into collaborative care models

Palyo S; Caraballo A; Shapiro G; Watkins-booth K; Cabrera J

New York Medical College; Columbia University Medical Center; Icahn School Of Medicine At Mt. Sinai; Weill Cornell Medical Center; New York University Langone School Of Medicine

Mental Disorders are found in all countries and in all populations including children. According to the WHO, “Mental disorders affect hundreds of millions of people and if left untreated it creates an enormous toll of suffering, disability and economic loss.” (1) For years mental health care has been overlooked as an important component in strengthening health care. Today, there is a movement towards integrating psychiatric treatment more into healthcare and also into other systems such as schools that promote the wellbeing of children. This integration is happening throughout the world but we believe that more education and knowledge should be made available to providers that may not have been accustomed to this way of thinking or working.

The focus of this presentation is to educate and explore the experiences of mental health involvement with other medical specialties as well as other child-focused systems of care such as child protective services and schools.

Each presenter will discuss his or her role as a clinician in different treatment models and explain the evolution of child psychiatry in their respective clinics. Drs. Caraballo and Cabrera use their

extensive experience to explain how child psychiatry has been incorporated into traditionally non-psychiatry focused organizations such as schools and child protective services foster care agencies. Drs. Shapiro and Booth-Watkins will discuss having a primarily psychiatric focused clinic-community mental health clinic and partial hospitalization and how they have been incentivized to include other child focused services such as pediatrics and government agencies into their programs.

Following the four presentations, Dr. Palyo will lead a discussion with the audience to participate in processing the benefits and foreseeable obstacles that arise with the trend of integrated mental health and health care.

Each presenter will speak for 15 minutes with a 30-minute discussion.

Workshop

Services, Treatments, and Advocacy: Child and Adolescent MH Services and Multidisciplinary Teams

Keywords: Multidisciplinary Teams, Collaborative Care, Schools, Pediatrics

References:

Report from WHO and Wonca: Integrating Mental Health Care into primary care: A global Perspective (will complete later)

A3-03

Hematopoietic cell transplantation for the children with sickle cell disease : the parents’ experience.

Cavadini R; Drain E; D’Autume C; Giannica D; Moro M; Baubet T; Bernaudin F; Taïeb O

Maison Blanche Hospital, Paris, France; Avicenne Hospital, Ea 4403, Paris Xiii University & Assistance Publique-hôpitaux De Paris, Inserm U669; Avicenne Hospital, Ea 4403, Paris Xiii University & Assistance Publique-hôpitaux De Paris, Inserm U669.; Cochin Hospital, Paris Descartes University & Assistance Publique-hôpitaux De Paris, Inserm U669; Centre Hospitalier Intercommunal De Créteil

Intra-familial hematopoietic cell transplantation (HCT) is currently the only curative treatment for sickle cell disease, allowing to prevent vascular complications in children at high risk. The psychological implications are significant, either for the recipient, the sibling donor, the parents, or the other siblings. We have been seeking to explore the experience of parents through the medical process, using interpretative phenomenological analysis of semi-structured interviews conducted at three stages : before transplantation, three months later and one year later. In the six families included in the inquiry (recipient aged between four and ten years), we have found three main results that are common to the different parents’ experiences : 1) « How to deal with anxiety ». Parents were faced with the experience of anxiety at different times of the process : before the transplantation, despite the hope of a recovery; during the hospitalization, where the anxiety was related to intense stress disorder; and after returning home, despite the relief felt by the whole family group. The most common coping strategies were the use of positive thinking, the support of the family environment, and praying. 2) « How to remain parents ». Despite the worry and the feelings of helplessness faced by the parents, they had no choice but to remain and to act as parents, not only towards the recipient but also towards the sibling donor and the other siblings, in a family group undergoing transformation. These involved the mobilization of important resources, both on individual and family levels. 3) « How to acknowledge the gift », beyond the debt and the guilt entailed by the singular experience of the trans-

plantation. The opportunity of seeing their child recover could arouse a two-fold feeling of guilt, first related to those families who were without a donor, and secondly to their own families back home. In the discourse of the parents, God was the source of this gift, a belief which avoided placing the sibling donor in a strange position of omnipotence. Finally, parental experiences of HCT turned out to be complex, involving singular and conflicting phenomena at different levels: intrapsychic, family, cultural and existential. The awareness of the medical teams regarding these issues is important so as to provide the best support for the parents during this challenging process.

A3-04

Adhd and comorbid anxiety: clinical cases and treatment algorithm

Figueroa-quintana A; Ramirez A; Soutullo C

Hospital Perpetuo Socorro; Ceam, Centro De Atención Multidisciplinar; Clinica Universidad De Navarra

ADHD and comorbid anxiety: Clinical cases and treatment algorithm
Background: Anxiety symptoms and anxiety disorders are the most frequent psychiatric problems in children, and one of the most frequent comorbid conditions in children and adolescents with ADHD. There is evidence that some pharmacological treatments for ADHD can worsen anxiety symptoms. Thus, a treatment protocol and close monitoring are essential to treat patients with both conditions. Sometimes ADHD can cause anxiety symptoms (primary ADHD), other times anxiety can present as inattention and/or hyperactivity (primary anxiety), but other times patients may suffer both disorders independently (true comorbidity).

Methods: The authors will present real clinical cases with supporting videos of first evaluation and response to pharmacological and psychotherapeutic treatment (cognitive behavioral therapy, CBT). With the support of these clinical cases, the authors will review the process of decision making based on current published evidence. They will discuss possible complications that might arise during treatment and ways to manage them.

Results: As it is described in the published literature, methylphenidate (MPH) may worsen symptoms of anxiety in some patients, improve them in others, and in others MPH may not affect anxiety. The right combination AND sequence of pharmacological and psychological treatment is key to improve both conditions. As in every patient, in order to prescribe a correct treatment, an exact diagnosis is fundamental. The clinician should assess which is the primary and which is the secondary disorder.

Conclusion: At the end of this workshop, participants will have developed skills to better assess, diagnose and treat children and adolescents with ADHD and comorbid anxiety disorders. Participants will learn to decide which condition treat first, and what medication (or combination of medications, and their sequence) and cognitive behavioral therapy prescribe, to maximize treatment outcome.

A3-05

Study of pre-school ADHD risk factors

Bilenberg N; Asmussen J

Psychiatric Hospital Of Southern Denmark

Introduction: Attention Deficit Hyperactivity Disorder (ADHD) is a neuropsychiatric disorder with both genetic as environmental etiology.

Research that combines genetics, biology, environmental risk factors and early development of symptoms is still sparse.

Material and Methods: 2,551 pregnant women giving birth in the municipality of Odense, Denmark in 2010-13 were recruited for a birth cohort. Data and biological material was collected during pregnancy, at birth and in the first three years of the infant. ADHD symptoms and other emotional and behavioral symptoms are rated by parents and teacher by use of CBCL 1½-5 and C-TRF at about age 30 months. Data on psychiatric heredity (registrar data), pregnancy and parent social status are combined with information about day-care setting, sleep and ADHD symptoms.

Results: Parentally reported ADHD problems and sleep problems was highly correlated ($\rho = 0.47$; $p < 0.0001$). Parent-reported parasomnia and night awakenings were significantly more frequent in an ADHD high score group vs. a low score group ($p < 0.01$). Also, actigraphy measures revealed that ADHD high score's had a more restless sleep compared to controls ($p < 0.001$), and tendency to more frequent night awakenings ($p = 0.06$). We found no differences in Total Sleep Time or Sleep Onset Latency.

Number of month spent in day-care centre was significantly associated with lower levels of caregiver-reported total problem score and internalizing behaviour compared to tending in private day-care. These associations were not found in the parent-reports. No associations between age entering childcare and the outcome measures (CBCL/C-TRF problem scores) were found.

Discussion: Sleep problems and day-care setting among other factors, are possible hazards of pushing susceptible children, with parental disposition, towards fulfilling ADHD criteria.

Perspective: These results are preliminary and part of a larger follow-up study, all aiming at development of a "Preschool ADHD Risk Index" which can be implemented in the primary sector to target ADHD-at-risk-children early in life.

A3-06

Motivational interviewing for adolescent substance use

Atkinson D; Krakower S; Sparks G

University Of Texas-southwestern; Hofstra North Shore-long Island Jewish School Of Medicine; University Of Pittsburgh School Of Medicine

Motivational Interviewing has been a mainstay of substance use treatment. Many practitioners are not familiar with the techniques and can become frustrated with adolescents who use substances. The techniques of motivational interviewing are teachable, and the teaching strategies have also become evidence-based. This workshop would be to help practitioners gain familiarity with the technique of motivational interviewing, and assist in dissemination of the technique. The introduction is hoped to be a gateway for attendees to become knowledgeable about the concepts, and to facilitate the attaining further training on the techniques.

Motivational Interviewing is a technique that relies upon an empathic stance, open questions and reflective listening. There is an ongoing need for supervision of the providers. A recent review of motivational interviewing by Jensen, Cushing, and Aylward (Journal of Consulting and Clinical Psychology: 2011, 79 (4), p. 433-440 reported that there were effects even in studies that used only one session. The effect sizes were modest, 0.17. The intervention is one of the few that is acceptable to the client that does not want change, and gives the practitioner an evidence-based intervention towards a dangerous behavior.

In this clinical workshop, Dr. Atkinson will introduce the problem for 5 minutes, and then Dr. Sparks will give a 20 minute talk on

the principles of motivational interviewing. The micro-skills of Open-ended statements, affirmations, reflections, and summaries will be taught. A 20 minute practice session will focus on these skills. Scott Krakower will talk for 15 minutes on the patients' perspective and reaction to motivational interviewing. A 20 minute practice session will follow with participants practicing dealing with challenging situations, followed by a 10 minute summary by Dr. Atkinson, and the remaining time will be for questions and answers with the panel.

During the workshop, Drs. Krakower, Sparks, and Atkinson will go around the room, observing how participants apply the skills that are being taught, and correcting as needed. The summary will obtain the participants reaction to the techniques and how they thought the techniques worked. We will provide information on how to obtain future training in motivational interviewing.

A4-01

Internet gaming disorder and other media-related disorders and adolescent psychopathology

Bilke-hentsch O

Modellstation Somosa

Pathological internet and media use ("PIU") seems to emerge as an important public mental health problem in children and adolescents and is partially considered in DSM5 as a disease entity.

Although the concept is discussed critically by addiction therapists, there exist clinical and neurobiological findings, that PIU and its severe addiction form resembles classical adolescent addiction patterns such as marijuana or alcohol dependency. There seems to be a small but severely ill subgroup of multiple media users with comorbidity and multiple risk factors that develop pervasive social isolation, increase of dosage craving and other features of addiction.

This is important in particular for ADHD-, BPD- and PTSD-patients, because their core symptoms are excessively rewarded by several internet and media-applications.

Content:

In this seminar recent diagnostic and therapeutic concepts will be discussed in order to encourage therapists to recognize PIU as a major problem in an increasing subgroup of adolescent patients.

Using the clinical diagnosis PIU, offering a comorbidity-oriented out- and in-patient approach with counselling of parents and teachers and treating them in a three-step-program seem to be a beginning in this field.

Audience:

This seminar is directed to clinicians as well as researchers who are interested in the impact of new (social) media on their patients and their families. No previous knowledge is needed.

A4-02

Not getting out of bed... a lazy adolescent, or... a sleeping disorder?!

Hop J; Stoffelsen R; De Bruin E

Altrecht; De Bascule / Vumc; University Of Amsterdam (uva)

Workshop leaders:

This workshop has emerged from the expert group on sleeping disorders of the Dutch Knowledge Centre for Child and

Adolescent Psychiatry. The workshop leaders are Jeannette Hop (child and adolescent psychiatrist, Altrecht; Zeist, the Netherlands), Reino Stoffelsen (child and adolescent psychiatrist, de Bascule/VUmc, department of behavioral disorders; Amsterdam, the Netherlands), and Ed de Bruin (clinical neuropsychologist and researcher, UvA; Amsterdam, the Netherlands).

Content:

Many adolescents experience problems with their sleep. They fall asleep late and have difficulties getting up. Apart from the grumpiness in the morning, for most adolescents these sleep problems do not result in serious dysfunctions. But there are also adolescents whose difficulties with sleeping develop into chronic sleep disorders like insomnia or delayed sleep phase syndrome. These issues have severe consequences: concentration problems, disturbed mood, somatic complaints, problems at school, fights at home, and they can cause or worsen psychiatric problems.

During this workshop we will highlight the most common sleep problems among adolescents and their relation with several psychiatric problems. When are there comorbid problems, and when can the psychiatric problems be explained by a sleeping disorder? Attention will be given to both diagnosis and treatment as seen in the average practice for child psychiatry. We will also discuss the indicators and possibilities for referral.

Practical knowledge will be shared in an interactive manner using a case report. Workshop participants will also have the opportunity to put forward their own cases.

After taking part in this workshop, the participant will be able to:

- Be more alert to the existence of a (comorbid) sleeping disorder among adolescents;
- Make an assessment of the type of sleeping problem, by asking the right questions;
- Apply some important behavioral interventions;
- Be aware of the indicators for referral.

Key references:

De Bruin E.J., Oort F.J., Bögels S.M., & Meijer A.M. Efficacy of internet and group-administered cognitive behavioral therapy for insomnia in adolescents; a pilot study. *Behav. Sleep Med.* 2013;11:1-20, DOI: [10.1080/15402002.2013.784703](https://doi.org/10.1080/15402002.2013.784703).

Van Maanen, A., Dewald-Kaufmann, J.F., Smits, M.G., Oort, F.J., & Meijer, A.M. Chronic sleep reduction in adolescents with Delayed Sleep Phase Disorder and effects of melatonin treatment. *Sleep and Biological Rhythms.* 2013;11: 99-104

De Bruin, E.J., Van Kampen, R.K.A., Van Kooten, T., & Meijer, A.M. Psychometric Properties and Clinical Relevance of the Adolescent Sleep Hygiene Scale in Dutch Adolescents. *Sleep Medicine*, 2014 (in press).

A4-03

Treating behavioural sleep problems in children with adhd and asd: the sleeping sound program

Sciberras E; Rinehart N

Murdoch Childrens Research Institute; Deakin University

Sleep problems affect up to 70% of children with Attention-Deficit/Hyperactivity Disorder (ADHD) and 86% of children with Autism Spectrum Disorders (ASD). A growing body of research suggests that sleep problems adversely impact child and parent wellbeing in children with ADHD and ASD. Although sleep interventions have been shown to be effective in managing sleep problems in typically developing children, until recently it was unknown whether these interventions were efficacious in children with ADHD and ASD. The

Sleeping Sound with ADHD study is the first large-scale randomised controlled trial (RCT) examining the efficacy of treating sleep problems in children with ADHD (N=244; 25% of the sample had comorbid ASD). All participants met DSM-IV criteria for ADHD and had a moderate/severe sleep problem that met American Academy of Sleep Medicine criteria for a behavioural sleep disorder. The Sleeping Sound intervention comprised two consultations and a follow-up phone call covering sleep hygiene and standardised behavioural strategies tailored to the child's presenting sleep problem. The control group received usual care from their paediatrician. The sleep intervention was associated with improved child outcomes which persisted until six months post-randomization including improved parent-reported child sleep (Cohen's $d = -0.6$), ADHD symptom severity ($d = -0.4$), quality of life ($d = 0.4$), daily functioning ($d = -0.6$) and behavior ($d = -0.6$). Intervention children also had improved teacher-reported classroom behavior ($d = 0.3$), as well as improved school attendance and working memory assessed via blinded assessment (Hiscock, Sciberras et al, British Medical Journal, In Press). The intervention was just as effective for children with ADHD presenting with comorbid ASD (Papadopoulos, Sciberras et al. Journal of Attention Disorders, In Press). We have recently commenced a translational RCT to examine the effectiveness of this intervention when delivered by the child's treating paediatrician or psychologist.

The aim of this workshop will be to provide delegates with practical strategies on managing sleep problems in children with ADHD and ASD based on the Sleeping Sound program. The presentation will provide a) an overview of common paediatric sleep difficulties and their assessment; b) information on normal sleep and sleep hygiene strategies; c) specific behavioural sleep management strategies for common paediatric sleep difficulties including bedtime resistance, insomnia, sleep onset associations, delayed sleep phase and night time anxiety; and d) evidence to support the use of these strategies from the Sleeping Sound trial.

A4-04 Protocolo magallanes de evaluación con adolescentes

Lopez Martinez M; Magaz Lago A

Grupo Alborcohs

Hoy en día, los/las profesionales que trabajamos con adolescentes nos encontramos enfrentadas a un progresivo aumento de los problemas de comportamiento.

La trascendencia que, tienen estos problemas exige una intervención rápida, decidida y, acertada, para conseguir prevenir su aparición o, al menos, resolverlos lo antes posible.

El principal interés de los Especialistas consiste en saber diseñar estrategias de Intervención, orientadas, a la Prevención y Resolución de Problemas de Conducta.

El diseño de una ESTRATEGIA requiere, la obtención de DATOS, cuyo análisis permita elaborar una HIPÓTESIS en la cual fundamentarla.

El objetivo de este taller es presentar como realizar la evaluación biopsicosocial con adolescentes de forma rápida, precisa y operativa, para obtener datos RELEVANTES, PERTINENTES, y SUFICIENTES, optimizando el tiempo dedicado a la evaluación.

A través del Protocolo Magallanes obtendremos datos referidos a características personales y circunstancias que influyen temporal o permanentemente sobre el individuo, así como en la identificación de la relación funcional existente entre ellos, que explica su modo de comportarse esporádica o habitualmente.

Los instrumentos son de recogida sistemática de datos observacionales, con los cuales, el profesional cualificado puede realizarla evaluación de cada caso.

Se presentan agrupados:

1. Cuestionarios, Escalas e Inventarios, para obtener información de terceras personas
2. Registros de Observación Directa, que facilitan datos específicos, referidos a la situación problema

A4-05 Autism spectrum disorders: biobehavioral issues for novel treatments

Canitano R; Schröder C; Speranza M

University Hospital Of Siena; University Hospital Of Strasbourg; Centre Hospitalier De Versailles

Abnormalities of biological and behavioral rhythms in autism spectrum disorders : the role of melatonin

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The role of biological and behavioral rhythms in typical and atypical development including autism spectrum disorders (ASD) is on the rise in current research. Recent studies have highlighted the importance of rhythmicity and synchrony of emotional, interpersonal and motor rhythms in early development of social communication. The role of melatonin in the ontogenetic establishment of circadian rhythms and the synchronization of the circadian clocks network is well established... Furthermore melatonin, as a regulator of physiological rhythms and oscillations, might enhance the capacity of children with ASD to synchronize their movements and verbal cues of others. Melatonin levels have been reported to be low in individuals with ASD and negatively correlated with the severity of verbal communication and social imitative play impairments. Clinical trials of melatonin focused on individuals with developmental disorders and sleep problems with a number of methodological flaws. The age range was very wide in some studies and pre-pubertal children were mixed with pubertal or post-pubertal individuals even if given is recognized that pineal melatonin secretion is influenced by age and pubertal stage. In addition the studies have been hampered by small sample sizes of children with autism or have been conducted on larger sample sizes of children with heterogeneous developmental disorders (children with autism mixed with blind children, pervasive developmental disorder not otherwise specified, or children with multiple neurological disabilities associated with intellectual disability) with no individualized results for the ASD group. Thus there is a main issue of non-specificity of the melatonin findings in ASD, as melatonin is widely used as a treatment in other disorders associated with intellectual disability. Future studies are needed to test the specificity of the current findings in ASD and/or intellectual disability.

A4-06 Selective mutism among children of migrants. Sandia's silence

Di Meo S; Van Den Hove C; Serre-pradere G; Simon A; Rezzoug D; Moro M; Baubet T

Universite Paris 13, Sorbonne Paris Cite, Ap-hp, HopitalAvicenne; Ap-hp; Ap-hp, HopitalAvicenne; Ap-hp, HopitalAvicenne, Hopital Cochin; Universite Paris 13, Sorbonne Paris Cite, Inserm U 669, Ap-hp, hopitalAvicenne; Universite Paris Descartes Sorbonne Paris Cite, Inserm U 669, Ap-hp, HopitalAvicenne; Universite Paris 13, Sorbonne Paris Cite, Inserm U 669, Ap-hp, HopitalAvicenne

Extrafamilial mutism or selective mutism is four times more frequent among bilingual migrant children than among monolingual native children. Our study's aim is, by way of a review of the psychiatric and anthropological literature, and of a clinical vignette from our transcultural practice at the Avicenne Hospital in Bobigny, to shed light on psychoaffective issues in a migration context, so as to integrate them into our care practice. We show that extrafamilial mutism perfectly illustrates the paradigmatic issues of migration: it reflects the children's difficulties to make links between the inside world (the family and the culture of origin, the world of affectivity) and the outside world (the school and the culture of residence, the world of rationality and pragmatism). Making link between the psychotherapeutic process at work in the transcultural consultation and a group therapy called "Bilingual group", we show that the symptom of selective mutism also resonates with separation and individuation issues at work in language development, and with loyalty issues regarding the culture of origin. The transcultural approach allows one to integrate the patients' specific cultures and histories, so that they succeed in making a cultural interbreeding between their two cultures. In other words, this allows to bridge the gap between the two cultural backgrounds of these children, giving them the possibility to draw from their different cultures and to stimulate their creativity. Perhaps our cares both able these children to talk as well as to develop listening skills, helping them becoming sensitive and creative adults, attentive towards others and their own feelings.

SUNDAY

SI-01 Cannabis medicalization, legalization, and commercialization: the American experience

David L. Atkinson, Scott Krakower, Garrett Sparks

University of Texas-Southwestern, Hofstra North Shore-LIJ School of Medicine, University of Pittsburgh School of Medicine, Pittsburgh, USA

Numerous problems have presented with the legalization of cannabis in the United States. Chief among these was an increased acceptance of the drug and a decrease in the perception of harm. More students have seen cannabis as acceptable, including new groups that did not previously accept the drug.

Also, there were not the expected reductions in drug-related arrests, or the expected decrease in alcohol use. Sifting through the scientific evidence has become more of a political war than a scientific one. We also did not see the scientific community consulted on

the changes that were made. Medicalization was one of the main reasons that the drug gained acceptance among the American Public. The claims of medicalization have outstripped the scientific evidence supporting them.

Dr. Krakower will offer an introduction to discuss the evolution of cannabis culture, and give examples of cannabis-related advertisements, and a brief history of medicalization, commercialization, and legalization. Then, Dr. Krakower will frame the clinical impact by discussing how legalization affects patients' cognitions regarding use. 20 min plus 5 min for questions.

Dr. Sparks will explain the medicalization movement, and analyze the therapeutic benefits of the medication, and contrasting these with the reported benefits for various disorders. Also, issues germane to the low-level of regulation will be discussed, such as discrepancies in potency and quality-control. 20 min, plus 5 min for questions.

Because the legalization has been on a state-by-state basis, analysis of the data will look at the potential effects of the change in drug policy, together with explanations for these effects. Dr. Atkinson will review the data on safety, substance use disorders, and frequency of use in the various states, while explaining limitations of the data. 20 min, plus 5 min for questions.

Drs. Sparks, Krakower, and Atkinson will moderate a 15 min discussion regarding the effects of legalization in America, and we will attempt to frame the "experiment" as an event for European Child and Adolescent Psychiatrists to learn from—and we will encourage child and adolescent psychiatrists to have a voice in shaping any potential policy changes in light of what has taken place in America.

We acknowledge a lack of expertise on European law and culture, but maintain that science has a place in informing public policy.

S1-02 Psychosocial treatment of children with disruptive behavior problems: efficacy, moderators and mediators

Manfred Doepfner, Christopher Hautmann

University of Cologne, Cologne, Germany; Department of Child and Adolescent Psychiatry at the University of Cologne, Germany; School of Child and Adolescent Cognitive Behavior Therapy at the University of Cologne, Germany

Disruptive behavior problems cover a broad range of disorders including Attention Deficit Hyperactivity Disorders (ADHD), Oppositional Defiant Disorder (ODD), and Conduct Disorders (CD). Children with these disorders are very often referred for treatment in child psychiatric and psychotherapeutic institutions and practices. Empirical research in the recent decades has shown that psychological interventions may be effective. However, further clinical trials within clinical settings are still needed to learn more about the efficacy of these interventions in clinical populations. This symposium presents clinical trials on the efficacy of psychosocial treatment approaches for children with ADHD and other disruptive disorders including school-based interventions, guided self-help approaches and outpatient treatment. Using a framework of multimodal psychological treatment patient focused as well as parent and teacher focused interventions were conducted for different clinical populations. Since randomized controlled parallel group designs are not always suitable in routine care innovative designs and data analysis approaches are needed. Besides classic between subject designs the studies presented in this symposium use within subject control group designs and multilevel modeling analyses. Results on the efficacy of the interventions as well as moderators and mediators of treatment effects are presented.

Presentations:

1. Christopher Hautmann and Manfred Döpfner (School of Child and Adolescent Cognitive Behavior Therapy at the University of Cologne, Germany; Department of Child and Adolescent Psychiatry at the University of Cologne, Germany): Comparison of behavioral and non-directive guided self-help for parents of children with externalizing behavior problems
2. Christina Dose and Manfred Döpfner (Department of Child and Adolescent Psychiatry at the University of Cologne, Germany): Effects of telephone assisted self-help as enhancement of methylphenidate treatment in children with ADHD
3. Manfred Döpfner, Anja Görtz-Dorten, Hendrik Hasselbeck and Christopher Hautmann School of Child and Adolescent Cognitive Behavior Therapy at the University of Cologne, Germany; Department of Child and Adolescent Psychiatry at the University of Cologne, Germany): Efficacy, Moderators and mediators in the treatment of children with aggressive behavior problems
4. Ilka Eichelberger, Charlotte Hanisch and Manfred Döpfner Department of Child and Adolescent Psychiatry at the University of Cologne, Germany; University of Applied Sciences, Düsseldorf, Germany: How effective is teacher coaching in reducing externalizing behavior problems in primary school children.

S1-02-01 Comparison of behavioral and non-directive guided self-help for parents of children with externalizing behavior problems

Christopher Hautmann, Manfred Döpfner

Introduction: For externalizing problems in children behavioral therapy is considered to be effective. Yet, what is currently not well understood is what factors make the therapy effective and if it is superior to other treatment approaches. In the current study the efficacy of a behaviorally and a non-directive guided self-help program for parents of children with externalizing problem behavior were compared. In psychotherapy research non-directive control groups are often used, because it is assumed that by this treatment approach primarily common treatment factors are realized (e.g., therapeutic relationship, hope).

Method: In this trial 149 families of children aged 4 to 11 years were included. The children were diagnosed either with attention-deficit/hyperactivity disorder (ADHD) or oppositional defiant disorder (ODD). This was a randomized controlled trial with an active control group. Parents of both treatment arms received parent booklets by post and obtained ten additional counseling telephone calls. The program of the experimental group was founded in behavioral therapy and for the control group in non-directive therapy. Parent ratings and blinded clinician ratings are reported. Assessments were made at baseline, post treatment as well as 6 and 12 months after treatment. A per-protocol analysis was conducted; only participants that completed the treatment were considered.

Results: In total 110 families finalized treatment. At post measurement increased parenting competencies in parent ratings (e.g., self-efficacy, positive parenting behavior, fewer parenting stress) and less ODD symptoms in blinded clinician ratings were observed for the behavioral self-help condition. At 6- and 12-months follow-up for most outcome measures no group differences could be detected. There is no indication of an increased efficacy of behaviorally based self-help programs in the long-term. The similarities and differences of both treatment approaches are discussed.

S1-02-02 Effects of telephone assisted self-help as enhancement of methylphenidate treatment in children with ADHD

Christina Dose, Manfred Döpfner

Department of Child and Adolescent Psychiatry at the University of Cologne, Germany

Introduction: Parenting trainings have shown to be effective in the treatment of children with ADHD. However, training programs are not available for all families in need of treatment due to different reasons like e.g. lack of time or financial resources, lack of local treatment options, or fear of stigmatization. For these families, telephone assisted self-help may be a viable treatment alternative. With regard to the enhancement of methylphenidate treatment by psychosocial interventions, the results of previous research are inconclusive. The present study aimed to evaluate a telephone assisted self-help program (consisting of eight booklets dealing with disruptive behavior disorders and parenting accompanied by 14 consultations per telephone) in a population of parents with children diagnosed with ADHD who were already treated with methylphenidate.

Method: Participants were parents of school children aged 6 to 12 years who already received methylphenidate treatment and who showed impairment in psychosocial functioning. The parents were randomized to either an intervention or a waitlist control group. Parents in the intervention group received the telephone assisted self-help program for 1 year. During this time, parents in the waitlist control group received treatment as usual. The primary outcome variable was psychosocial functioning, the secondary outcome variables were ADHD and oppositional symptoms. They were measured at baseline and after 12 months in both groups.

Results: ANCOVAS (per-protocol analyses) controlling for the baseline data revealed significant differences between the intervention and the waitlist control group after 12 months regarding psychosocial functioning and oppositional symptoms. Effect sizes lay in the medium range. With respect to ADHD symptoms, no significant results were found.

Conclusion: The results suggest that telephone assisted self-help for parents of children with ADHD is effective as enhancement of methylphenidate treatment with regard to psychosocial functioning and oppositional symptoms.

S1-02-03 Efficacy, moderators and mediators in the treatment of children with aggressive behavior problems

Manfred Döpfner, Anja Görtz-Dorten, Hendrik Hasselbeck, Christopher Hautmann

School of Child and Adolescent Cognitive Behavior Therapy at the University of Cologne, Germany; Department of Child and Adolescent Psychiatry at the University of Cologne, Germany

Objectives: The German Treatment Program for Children with Aggressive Behaviour (Therapieprogramm für Kindermitaggressivem Verhalten, THAV) aims at the therapy of children aged 6 to 12 years with peer-related aggressive behaviour, which results in a persistent impairment of the relationships to other children. Contrary to other treatment approaches, this intervention aims at the individual treatment of problem maintaining and moderating factors of aggressive behaviour. Depending on the individual problem maintaining factors the treatment aims to modify social cognitive information processing,

impulse control, social problem solving, social skills and social interactions in specific situations. Methods: The efficacy is evaluated in a randomized control group design with $n = 101$ children. $N = 60$ children are treated for about half a year with the modules of THAV in weekly individual sessions. The control group of $n = 41$ children receives alternative interventions with group play and techniques to activate resources of the child. These interventions give the children the opportunity to train pro-social interactions. Outcome parameters are aggressive behaviour and comorbid symptoms as well as problem maintaining factors, psychosocial functioning, family burden and treatment satisfaction. Moreover, variables of the treatment process are assessed. Questionnaires, tests and individual problem checklist were used to assess these outcome and process parameters Results: Reductions of aggressive behaviour, comorbid symptoms and problem maintaining factors could be found but in parent and teacher ratings. The effect sizes are ranging from small to large effects. Moreover, moderators and mediators of are analysed. Potential moderators are (1) demographic characteristics of the patient (e.g. age, gender) and (2) the family (e.g. socioeconomic status, family status), (3) characteristics of the disorder at pre-treatment (severity of symptoms, comorbidity), (4) further psychological characteristics of the patient (e.g. intelligence), (5) parenting behavior and family climate and (6) parental psychopathology. In the first step bivariate correlations in both treatment groups between the predictor variables and the symptom change during the treatment were analyzed. The strongest correlations were found between the strength of peer-related aggression and overall mental health problems rated by parents at pretreatment.

S1-02-04 How effective is teacher coaching in reducing externalizing behavior problems in primary school children

Ilka Eichelberger, Charlotte Hanisch, Manfred Döpfner

Department of Child and Adolescent Psychiatry at the University of Cologne, Germany; University of Applied Sciences, Düsseldorf, Germany

Objectives: Disruptive behavior and attention problems may impair academic functioning of children with externalizing behavior problems. This and the implementation of the UN Convention on the Rights of Persons with Disabilities and thus the right of inclusion call for effective strategies to reduce externalizing behavior problems in general education settings. Classroom behavioral interventions like daily report cards, behavioral consultation with teachers, or contingency management have been found to be effective in reducing externalizing behavior problems in school for clinical populations (e.g. DuPaul et al., 2011; Maggin et al., 2012). Methodology: We developed a teacher coaching program in which teachers were coached in 6 individual coaching sessions to apply these strategies to target children. Effects are tested in a within subject control group design. Dependent measures reported here are teacher rated child behavior and teacher classroom management strategies. Results: 62 teachers will have completed the coaching by the end of the next school term in June 2015. This talk will thus report short-term effects of this sample and will draw first conclusions on the efficacy of our teacher coaching program.

S1-03 Current transcultural clinical approach in adolescence

M. Marie Rose, M. Malika, F. Marion, E. Mayssa'

Workplaces: M.d., Ph. D., Professor Of Child And Adolescent Psychiatry, University Paris Descartes, Sorbonne Paris Cité, Psychology Institute, Psychoanalyst, Head of the Child and Adolescent Psychiatry Department of Cochin Hospital, Paris, Director of the Trans; Clinical Psychologist-Child and Adolescent Psychiatry Department-Saint-denis Hospital, Researcher Inserm U669; Maître De Conférences In Clinical Psychology, Clinical Psychologist, Researcher Pcpp Ea 4056, University Paris Descartes, Sorbonne Paris Cité, Psychology Institute; Clinical Psychologist- Adolescent Psychiatry Department- Cochin Hospital; Ph.d. Candidate- Paris 13 University-sorbonne Paris Cité; Researcher Inserm U 699

• Title of the symposia:

Current transcultural clinical approach in adolescence

• Title of each lecture

1. Marie Rose Moro: Breaking the deadlock of the adolescence process in second generation adolescents: current transcultural research and clinical practice
2. Mayssa Husseini: Countertransference to Trauma: a transitional breach in the therapists' identity- qualitative approach to counter transference among trauma therapists
3. Marion Feldman: A clinical approach to address the suffering of adolescents struggling in a paradoxical filiation
4. Malika Mansouri: Personal and collective paths of French adolescents born under colonial trauma—a transcultural research

S1-03-01 Breaking the deadlock of the adolescence process in second generation adolescents: current transcultural research and clinical practice

Marie Rose Moro

Context and objective: The adolescence process in transcultural context lodges certain particularities that can be observed in psychopathological manifestations. Contemporary research in transcultural clinic with second generation adolescents highlights the complexity and specificity of the adolescence process as experienced in the hosting society. We propose hereby to examine the needs of adolescents descending from migrant parents in Europe in order to adapt our clinical approaches.

Method: We refer to the research corpus of the transcultural psychiatry and its methodology developed in Europe and Canada for 30 years now. Addressing the needs of these adolescents requires a complementary method: examining a phenomenon through resorting, obligatorily but not simultaneously, to anthropology and psychoanalysis. Both approaches are mandatory to analyze the psychological functioning of adolescents, their intersubjective modalities, their family functioning and the social context where they evolve.

Discussion: The hosting society is underpinned with preconceived ideas and fearful representations towards migrants. Such representations reflected by the hosting society impact the image of the adolescents' parents.

Migrants' children undergo a phase of high vulnerability at the adolescence. The transcultural situation where the journey of adolescence is experienced generates identity conflicts. Thus, the complexity of the adolescence construct is intensified by migration problematics. Transcultural configuration multiplies and sometimes opposes figures of identification: parental figures, figures related to the parents' society of origin on one hand, and figures transmitted in the hosting society through the neighborhood, the school, or the media on the other hand. However, on a psychological level, adolescents need to intertwine harmoniously their filiation and the multiple affiliations offered by the transcultural topography.

Conclusion: The adolescence process in a migration context entails a “metissage” process. The adolescents’ reality offers multiple ways of belonging and transnational aspirations. Adolescents can sometimes feel deadlocked and thus need help to reactivate their psychological creativity to reacquire pride and happiness.

Keywords: Transcultural psychiatry, Adolescent psychopathology, Migrants of second generation, Vulnerability, Creativity.

S1-03-02

Countertransference to trauma: a transitional breach in the therapists’ identity-qualitative approach to counter transference among trauma therapists

Mayssa’ el Hussein

Objectives: To explore the mechanisms implicated in trauma transmission through counter transference reactions in therapists working with traumatized patients; to identify trauma impact on therapists and the processes underlying vicarious traumatization.

Method: An interview protocol for therapists working with traumatized patients introduces the concept of emergent scenario (Lachal 2006; 2012; 2015). Semi-structured interviews of 1 h and a half in average designed for the purpose of this research were conducted with 45 therapists working with traumatized patients. The interviews were analyzed following the principles of the Interpretative Phenomenological Analysis promoting the therapists subjective experience of the studied phenomenon.

Results: First findings reveal several indicators of trauma transmission amongst therapists, identified throughout their narratives. Therapists interviewed could express a feeling of disinclusion from the therapists’ community; inability to re-account the narratives of the patients or to share the emotional confusion stirred by the therapy and that could affect the therapist’s vision of the world around; experiencing moments of strangeness and inner disquiet; discomfort pertaining to the validity of their theoretical background; resonance in the defense mechanisms deployed by therapists and by patients at certain moments of the therapy; resorting to disregarding cultural interpretations/generalizations to make sense of an utterly painful situation and put a protective distance with the patients’ culture of origin; three types of emergent scenarios.

Discussion: Our study results reflect interesting subtleties in countertransference reactions to trauma narratives and shed light on processes indicative of trauma transmission. It also provides corroborative evidence to previous study findings in the field of countertransference to trauma work (Dalenberg, 2000; Lachal, 2006, 2012; Wilson and Lindy, 1994).

The transitory disruptions in the therapists’ beliefs highlight the particularly intense mobilization of countertransference reactions to trauma. Exploring the disorganization in each therapist’s narrative structure reflects the style of that therapist’s defense mechanisms implicated in countertransference.

The transgressive aspects of the trauma narratives are the most implicated in the disqualification of the patients’ culture of origin.

Conclusion: The findings of this study underline the presence of trauma transmission and depict some of the channels through which it is conveyed within countertransference reactions. However, this transmission is not static and does not necessarily obstruct the therapeutic alliance, insofar as the examination of countertransference reactions helps transform trauma transmission elements into means to better understand the therapeutic process.

Keywords: Countertransference, Vicarious traumatization, Humanitarian context.

S1-03-03

A clinical approach to address the suffering of adolescents struggling in a paradoxical filiation

Marion Feldman

Context and objectives: Childhood Protection Organization has difficulties to provide adapted care to adolescents presenting high risks of psychopathology and other behavioral disorders/symptoms. Those adolescents had faced numerous difficulties in the course of their residency in foster families, foyers and hostels. It hadn’t been possible for them to settle in the above mentioned places as they were not adapted enough to their conflictual situation/problematic.

Before being entrusted to the Childhood Protection Organization, those adolescents had been exposed to mistreatment, carelessness. Our objective is to reflect upon a better adjusted clinical approach in order to provide care and accompaniment to the adolescents among whom many suffer from several disorders such as PTSD.

Method: The analysis is based on ten clinical situations of adolescents. They have been staying in a foster home opened recently for a limited number of adolescents who had been wandering in different structures. This foster home provides an alternative to the hotel placement.

Discussion: Symptoms identified Relate to the devastating effect of family toxicity along with repetitive placements. Ruptures and discontinuity seem to have actively contributed to a paradoxical filiation processing in the adolescents’ identity’s development. We suggest hereby a multi-perspective re-filiation process declined into 5 axis: dis-holding holding; permanency; third-party and multi-focalization; and transformation.

Conclusion: Clinical-educational practices require creativity and a multidirectional care system. Adolescence is a phase in life mobilizing psychological processes along with body transformations which urge the adolescent to question his/her filiation and belonging. Cultural, family and individual ingredients are to be integrated within the transformation dynamic.

Keywords: Adolescent, Placements, Violence, Care, Pluri-filiation.

S1-03-04

Personal and collective paths of French adolescents born under colonial trauma: a transcultural research

Malika Mansouri

Context: According to a sociological study (Delon, Mucchielli, 2006), French “riots” of 2005 were orchestrated by French teenagers of “immigrant origin” amongst whom, over 78 % are descendants from former French colonies, unlike previous European immigrations. The attempts of understanding the rioting phenomenon multiplied, yet without questioning the specificity of their filiation or interviewing the main actors. Through a transcultural research, I have proposed to focus on the testimony of the youth deriving from the colonial and French-Algerian post-colonial history.

Methods: Following a qualitative approach, I have explored the underlying meaning the young French rioters had expressed throughout their anger and acting out during the events. For the purpose of the research, I have met 15 French adolescents from Algerian origin. During the interviews, I have delved into the subjective impacts of a collective history on individual affects. Complementary method helped intertwining the analysis of collective representations related to history and unconscious dynamics, along with transgenerational transmission.

Results: Results highlight the importance of the “historic disaster” undermining the riots. The violence endured throughout history clamped a non-existence status onto the parents’ generation. This status colluded with the adolescents’ actual reality, propelling them into this non-existence status. Such collusion breaches in the subjectivation process, defining the trauma. Adolescent “rage” represents a struggle for existence through strength and crash despite the lack of differentiation processes. This gap obviates the assertion of a subjectivity differentiated from the mythological group: the children of immigrants. From shame to hatred, each adolescent seems to fight against despair, and the mandate of loyalty to the ancestors which negates any possible separation. Alike their colonized ascendants, these adolescents seem to be stuck between two possible choices as defined by Frantz Fanon: submission to petrification or a possibly violent revolt. In this sense, explosion is a self-protective measure against implosion and petrification.

Conclusion: This research highlights the importance of creating spaces for metaphoric processing, where adolescent can experience being subject of their memory and history, acquiring the ability to symbolize and therefore to remember and to forget.

Keywords: Adolescence, Historical traumatism, Colonization.

S1-04

Identity disturbance in adolescents: a transcultural perspective

K. Schmeck, N. Rudic, M. Kassin, L. Tardivo

Psychiatric University Hospitals, Institute of Mental Health, Iberoamerican University, University of Sao Paulo, Sao Paulo, Brazil

Symposium

“Identity disturbance in adolescents - a transcultural perspective”

In the alternative model of personality disorders in the Diagnostic and Statistical Manual DSM-5 the construct “identity” has been integrated as a central diagnostic criterion. Identity is described as the experience of oneself as unique, with clear boundaries between self and others, a stability of self-esteem and an accuracy of self-appraisal as well as the ability to regulate a range of emotional experiences.

The consolidation of identity is one of the most relevant developmental tasks of adolescence, so that the emergence of normal ego identity, identity crises or identity diffusion can be seen as the crucial characteristic of normal and pathological personality development. Disturbance of identity results in decreased flexibility and adaptability of functioning in the areas of self-regulation, interpersonal relations, and meaningful productive actions.

In this symposium we will describe the significance of the construct identity for the understanding of disturbed personality development in adolescents from different cultural backgrounds.

The first talk gives an overview of different concepts of identity and an introduction to the alternative classification of personality disorders in DSM-5 Chapter III. The second talk will focus on the current societal impact on the development of identity in adolescents from Serbia. The third talk relies on empirical data from a Mexican prison population where the identity development of adolescents under these extremely difficult circumstances was studied. The last talk is based on the investigation of several juvenile populations in Brazil and will focus on identity development of adolescents who have experienced severe violence in their families.

Keywords: Identity, Development, Adolescence, Personality disorder, Transcultural psychiatry.

Chair: Schmeck, K.

Co-Chair: Schlüter-Müller, S.

“The role of identity in the DSM5-classification of personality disorders”

Klaus Schmeck, Kirstin Goth, Susanne Schlüter-Müller
Department of Child and Adolescent Psychiatric Research, Psychiatric University Hospitals (UPK) Basel

“Vicissitude of identity development in Serbian adolescents”
Nenad Rudic, Marko Kalanj, Jelena Radosavljev-Kircanski, Zeljka Kosutic
Institute of Mental Health, Clinic for Children and Adolescents, Belgrade, Serbia

“Identity of adolescents in a Mexican prison population”
Moises Kassin
Mexican Institute of Studies of Personality Disorders, Iberoamerican University, Mexico City, Mexico;

“Identity disturbance in Brazilian adolescents with a history of severe intrafamilial violence”

Leila Tardivo, Paula Miura, Malka Alhanat
Institute of Psychology, University of Sao Paulo, (Av. Professor Mello Moraes, 1721-Bloco F-Cidade Universitária), Sao Paulo, (CEP: 05508-030), Brazil.

S1-04-01

The role of identity in the DSM5-classification of personality disorders

Klaus Schmeck, Kirstin Goth, Susanne Schlüter-Müller*
**(main author)*

Objective: The consolidation of identity is one of the most relevant developmental tasks of adolescence, so that the emergence of normal ego identity, identity crises or identity diffusion can be seen as the crucial characteristic of normal and pathological personality development. In the alternative model of personality disorders in the Diagnostic and Statistical Manual DSM-5 the construct “Identity” has been integrated as a central diagnostic criterion. This talk gives an overview of different concepts of identity and demonstrates the alternative classification of personality disorders in DSM-5 Chapter III. **Methods:** The alternative model’s hybrid nature leads to the simultaneous use of diagnoses and the newly developed “Level of Personality Functioning-Scale” (a dimensional tool to define the severity of the disorder). Pathological personality traits are assessed in five broad domains which are divided into 25 trait facets. With this dimensional approach, the new classification system gives the opportunity to describe the patient in much more detail than previously possible. We have used the new classification system in a clinical sample of 20 adolescents (age range 14–18 years) with severe personality disorder (diagnosed with the structured interview SCID-II) and assessed identity development with the questionnaire Assessment of Identity Development in Adolescence (AIDA).

Results: In this sample of adolescents with different types of personality disorders the newly developed “Level of Personality Functioning Scale” yields a meaningful tool to describe the severity of the disorder. With T-scores of 73 for both total score and subscale scores the mean AIDA scale scores of these personality disordered adolescents were far above the un-referred population and other clinical samples.

Conclusion: In comparison to a single diagnosis the amount of information that is given within the complete diagnostic procedure of the new DSM-5 classification system is enormous. However the procedure is much more complex and it takes time and training for clinicians to fully understand and apply the new system. It is essential

that new assessment instruments are developed that are easy to administer to reduce the complexity of the new classification system.

Keywords: DSM-5, Identity, Adolescence, Personality disorder.

S1-04-02

Vicissitude of identity development in Serbian adolescents

Nenad Rudic*, Marko Kalanj, Jelena Radosavljev-Kircanski, Zeljka Kosutic *(main author)

Institute of Mental Health, Clinic for Children and Adolescents, Belgrade, Serbia, nenad.rudic@imh.org.rs

Objective: Difficulties in identity development in adolescents in the context of chronic adverse societal influences may sometimes be reflected in manifestations that are of clinical concern. In this talk we present results of a study aimed at assessing identity development of Serbian adolescents from inpatient clinical population, with the established diagnosis of mixed disorders of conduct and emotions (ICD 10: F 92).

Methods: The sample consisted of 59 adolescents (mixed sample, boys and girls, age range 12–18, mean age 15.25 ± 1.72 , 32 girls, 27 boys). The diagnosis of F 92 (Mixed disorders of conduct and emotions) was made according to the ICD 10 criteria, severity of symptoms and dysfunction in adaptive functioning warranted inpatient treatment. The questionnaire “Assessment of Identity Development in Adolescents” (AIDA) was used to assess identity development and to make comparisons with normative sample of children in general population.

Results: Results showed significant differences in the identity dimensions “Discontinuity” and “Incoherence” measured by AIDA in this group of patients, compared with a Serbian normative sample from a school population (incoherence $F(1,37) = 5,314$, $p < 0.05$, discontinuity $F(1,37) = 11,849$, $p < 0.01$).

Conclusions: The assessed difficulties in identity development in this group of patients, using AIDA, may point toward increased risk for developing personality disorders and need for specific interventions. Findings are discussed with a focus on the current societal impact on the development of identity in adolescents from Serbia.

Keywords: Identity, Adolescence, Personality disorders.

S1-04-03

Identity of adolescents in a Mexican prison population

Moises Kassin

Objective: In Mexico, the mean age of the current population is 26 years. The population census 2010 revealed a serious problem with school drop-outs among Mexican adolescents and labeled 26 % of adolescents aged between 15 and 19 years as “NINIS” (not studying, not working). As a consequence, adolescent delinquency has increased by 139 % in the last 6 years. The objective of the study was to understand identity and personality pathology in 155 adolescents from school and 90 from a treatment center for adolescents in conflict with law.

Methods: We used the questionnaires AIDA (Assessment of Identity Development in Adolescence; Goth et al., 2013); MACI (Millon Adolescent Clinical Inventory (Millon, 1993); YOQ 2.0 (Youth

Outcome Questionnaire; Burlingame et al., 2005), and the Structural Interview modified for adolescents (Foelsch et al., 2014).

Results: Much of Mexican adolescents in conflict with law are located in the Borderline personality organization continuum. Some Adolescent who have no identity diffusion are within the range of normal personality organization and only go through an identity crisis; they are in conflict with law by a juridical error or because they committed a minor fault. Others who did not report an identity diffusion have a psychopathy, or malignant narcissism: these adolescents have criminal and anti-social aspects integrated in their identity as a form of ethnicity and do not report an identity pathology.

Conclusions: It is important to highlight that a correct assessment of personality, identity and super ego functioning would help these young people to be provided with specific and effective psychotherapeutic treatments.

Keywords: Identity, Adolescence, Prison population.

S1-04-04

Identity disturbance in Brazilian adolescents with a history of severe intrafamilial violence

Leila Tardivo*, Paula Miura, Malka Alhanat *(main author)

Objective: This work is based on the investigation of several juvenile populations in Brazil with a focus on identity development of adolescents who have experienced severe violence in their families. Intra familial violence against children and adolescents results from the interaction of socio-economic, cultural and psychological factors of the people involved. Intra familial violence against a child or an adolescent represents a risk factor to the developmental process, which may lead to disturbances of personality and social adaptation. Studies in this area show that the experience of violence brings severe consequences to the human development, when person who are supposed to care for bring about pain and suffering, which promotes disturbances in the constitution of a healthy identity. The focus of the present study is to present data about the impact of intra familial violence on adolescents and to discuss the consequences.

Method: 100 adolescents, victims of intra familial violence, attended in specialized institutions, participated in this study, and 100 adolescents of a school population, with ages between 12 and 18 years. The instruments used were: Assessment of Identity Development in Adolescence (AIDA), Defense Style Questionnaire (DSQ-40) and Strengths and Difficulties Questionnaire (SDQ). The results of the school population and clinical group are compared, and cultural differences are discussed in depth.

Results: The victims of violence show more difficulties and weaknesses in the SDQ and more immature defenses in DSQ-40. They need help with developing more positive defenses, and strong models of identification. They feel a lack of affect and they reveal more identity diffusion (AIDA) when compared to the control group.

Conclusion: It's possible to get in touch with this difficult reality in our country, the presence of domestic intra familial violence against children and adolescents. Using this study and others, it is possible to support prevention and intervention programs, so necessary in the area. The suffering and consequences to development, in general, and in the formation of identity, in particular, are shown. Clinical researchers have to give voice especially to disadvantaged adolescents who deserve caring to develop a healthy identity and a better quality of life.

Keywords: Adolescents, Identity, Intra-family violence.

S1-05 New assessment instruments in child and adolescent psychiatry

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Presentations:

1. Child and Adolescent Behavior Inventory (CABI): a new alternative to CBCL.
2. A new diagnostic tool for eating disorders in childhood.
3. Intelligence and Controls of the Emotions: a new test for the evaluation of the emotional responsivity.
4. A new use of the Children's Play Therapy Instrument in assessment of psychomotor therapy of children with ASD.

S1-05-01 Child and adolescent behavior inventory (CABI): a new alternative to CBCL

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Keywords: Behavior, CBCL.

Introduction: The largely used Child Behavior Check List has been published in 1991. Except for a few modifications, the present CBCL/6-18 is based on the original 113 items. The construct validity of its 8 original syndrome dimensions has been questioned (Hartman et al., *J. Child Psychol. Psychiatry* 1999;40:1095–116). The 6 DSM-IV oriented scales (Achenbach et al., *J. Clin. Child Adol. Psychol.* 2003;32:328–40), confirmed for DSM-5, utilize only 55 items, therefore a large number of items remain unused for the clinical characterization, meanwhile the length of the questionnaire could discourage parents for accurate answers. CBCL is covered by copyright, an economic burden especially for epidemiological studies.

Following DSM-IV-R criteria, we built the CABI using items more representative for the symptoms of each disorder (still valid for DSM-5). Although CABI includes only 75 items, it explores an almost complete range of psychopathological disorders, including those not explored by CBCL. It is free for use, published in open access.

Here we present the completion of the normative data and the results of CABI in various pathological conditions, compared with CBCL.

Materials and methods: Normative data, reported in Cianchetti et al. (*Clin. Pract. Epidemiol. Mental Health* 2013;9:51–61) for children 8–10 y.o., were now extended including a school population 11–18 y.o. Moreover, in a polycentric study, both CABI and CBCL were administered to the parents/caregivers of 8–18 y.o. subjects affected with various psychiatric disorders. Data related to the different pathological conditions as resulted from CABI and CBCL were compared with the final diagnoses. For the comparison, the DSM-oriented scales of CBCL were used.

Results: Concerning normative data in subjects 11–18 y.o., the more marked difference compared to 8–10 y.o. is the higher presence of externalizing symptoms in males.

Concerning pathology, a significant degree of agreement of T values > 70 in both CABI and CBCL with the final diagnosis has been found in all the psychopathological domains explored by the interviews, and in CABI also in those not explored by CBCL, like eating disorders.

A disagreement between clinical diagnosis and the results of both CABI and CBCL has been found in about 5–20 % of cases in relation to the different disorders, suggesting a wrong evaluation by some parents-caregivers of the condition of the child-adolescent.

Conclusions: The CABI results a valid alternative to CBCL, carrying the same diagnostic capabilities. It has the advantage of a minor number of items, which facilitates the collaboration of parents/caregivers especially in case of epidemiological studies. Moreover, it is free.

S1-05-02 A new diagnostic tool for eating disorders in childhood

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Keywords: Diagnostic tool, Eating disorders.

Objective: A new questionnaire has been prepared for diagnostic evaluation of different kind of Eating Disorders (ED).

The most important objectives are represented by the possibility to give an efficient tool to evaluate the eating problems and also to screen an early identification of eating difficulties in infancy and preadolescence.

Materials and methods: The tool is designed for children/pre-teenagers, their parents, teachers and paediatricians. The gap (0–12 years) is further divided in three subgroups: 0–3 (three questionnaires with an anamnestic section), 4–7 (anamnesis and three questionnaires) and 8–12 years (in this group there is another questionnaire which the child has to complete lonely).

The project has 6 different steps:

1. Pre-operating step of identification and creation of the items based on the latest literature and the classification system of eating disorders;
2. Administer the questionnaires for the standardisation to a wide population divided in a normative sample and a clinical one (considering parents, teachers, pediatricians and children between 8 and 12 years) throughout collaboration with Schools and others Units of Child Neuropsychiatry.
3. Statistic evaluation of the data about the reliability of the test and of the its diagnostic categories.
4. Interpretation of the results and their use in clinical-therapeutic and research setting.
5. Review of the material for definitive draft.
6. Realization of an explicative manual about this tool for its editorial publication (Giunti O.S).

The working group will be composed by three specialized workers (clinical psychologists).

After an initial research step is essential to look after the test design. Later it will need to do a pilot analysis before the definitive data.

Results: The first results are coming from the collection of questionnaires distributed in different schools of North of Italy, 500 children, Centre of Italy, 500 coming from South of Italy. Now the questionnaires must be elaborated, but the first results indicate that in infancy ED are more frequent than expected.

Conclusions: It is important to have a diagnostic tool more and more accurate for early EDs, also considering the growing percentage of these diseases in the developmental age.

We think that an improvement in specificity of diagnostic tools could have a positive consequence on the speed and the quality of the action towards the younger patients and their families.

S1-05-03

Intelligence and controls of the emotions: a new test for the evaluation of the emotional responsivity

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Keywords: Emotional control, Test.

Introduction: To highlight defects or abnormalities in the control of the emotions is relevant for an early individuation of subjects at risk of psychopathology and for a psychotherapeutic intervention in overt disorders. Several instruments have been built for the evaluation of the control of the emotions in children and adolescents, all consisting of items in which the subject auto-evaluate his/her capability without a confrontation with a specific situation. The judgment is therefore extremely subjective, linked to the insight capability, often lacking in problematic subjects.

Therefore a new instrument has been organized, the ICE (Intelligence and Control of Emotions), in which the child should choose among 4 answers in front of a more concrete, adverse or frustrating or unpleasant, situation. The main types of responses are classifiable as: aggressive, anxious-depressive and adaptive.

Here we present the normative data for the ICE and the results in different pathological conditions.

Materials and methods: For the normative data the ICE was administered to 502 school children and adolescents aged 8 to 18 years. The pathological sample consists of 102 children affected with externalizing and 151 with internalizing disorders, aged 8–18 years.

Results: In the school population, a clear differentiation has been found between males and females in relation to the percentages of externalizing and internalizing responses. In males, a significant prevalence of externalizing responses has been found in every age band, and surprisingly even in the lowest, 8–10 y.o. Females show a prevalence of internalizing answers in each age band, with increasing values after the 10 years, when the difference compared to males becomes significant.

Children and adolescents with externalizing and internalizing disorders gave a significantly lower percentage of adaptive responses. Their prevalent type of responses was concordant with their emotional disorder. Subjects with conduct disorders (CD) and some with oppositional defiant disorders (ODD) showed an aggressive type of thinking. Instead, some subjects with externalizing disorder did not show an increase of aggressive response, but of adaptive or even anxious-depressive ones, suggesting an inability of emotional control in front of real situations, despite the knowledge of the correct way to behave.

Conclusions: The ICE test allows a better characterization of the emotional discontrol and of the abnormal modalities of thinking of certain subjects, especially those with ODD and CD, which can be useful for their treatment.

S1-05-04

A new use of the children's play therapy instrument in assessment of psychomotor therapy of children with ASD

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Keywords: CPTI, Psychomotor therapy, ASD.

Introduction: Very few instruments have been validated in order to verify the clinical efficacy of psychodynamic and relational therapies in developmental age. The Children's Play Therapy Instrument (CPTI) (Kernberg et al., J. Psychother. Pract. Res. 1998; 7:196–207) examines child's play activity in individual psychotherapy. Its use was reported in a case study describing the efficacy of the psychotherapeutic treatment of a 2.4 year-old child with autistic features. Further clinical researches, on larger samples, are needed in order to assess clinical processes and outcome in child relational therapies. We propose the use of CPTI for the assessment of the efficacy of psychomotor relational therapy of children with autism spectrum disorder.

Materials and methods: Ten children aged 22 to 87 months fulfilling Diagnostic and Statistical Manual of Mental Disorders-5 criteria for Autism Spectrum Disorder were enrolled at the Child and Adolescent Mental Health Department of San Gerardo Hospital.

The children were evaluated three times: at the time of diagnosis and after the first and the second year of psychomotor therapy. All the children were assessed using the Autism Diagnostic Observation Schedule (ADOS) and the CPTI. Parents underwent the Autism Diagnostic Interview Revised (ADI-R).

CPTI rating scale divides the psychomotor therapy session into segments of Non-Play, Pre-Play, Play Activity, and Play Interruption. The longest segment of Play Activity within a session is then analysed on three levels: Descriptive, Structural, and Functional.

Results: All children have changed significantly after 2 years of the psychomotor therapy as evidenced by the scores carried out at the ADOS, ADI, and CPTI. The progresses observed at the CPTI scores were correlated to those observed at the ADOS and ADI and the evolution of the symptomatology.

All instruments used concurred in highlighting the significant improvements, both globally and in specific areas of the development.

Conclusions: The importance of play activity in child development is well known, as well as its alterations in autistic spectrum disorders. The CPTI seems to be a reliable measure of play activity in the psychomotor therapy of children with autistic spectrum.

S1-06-01

Polyvictimized children in the legal system: prophylactic protections and policy considerations

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During the last decade several threads of psychological and neurobiological data have reshaped our basic knowledge of children's capacity for moral culpability and the effects of multiple forms of abuse on their psychopathology. For example, J. D. Ford, David Finkelhor and many other researches have started charting the effects

and mediating factors for polyvictimized children. However, the response by legal systems to this empirical data has been either slow or nonexistent.

This presentation analyzes the role of children in the legal system in relation to this new psychological evidence and offers practical and policy changes consistent with children's best interests. One recommendation is to modify the variables used to determine whether minors should be tried in juvenile or in adult courts for criminal violations. Annually in the United States approximately 2.11 million children are arrested, and a recent study estimated that approximately "[t]wo-thirds of males and three-quarters of females in juvenile detention have one or more psychiatric disorders." A second important issue covered in this presentation involves whether and under what circumstances the media should be admitted into cases involving juveniles. Another issue discussed concerns the appropriate out-of-home placements for polyvictimized and LGBTQ child victims. This demographic group has very special needs for placements that will increase their privacy, promote a better self-image, and reduce bullying against them. Further, what types of sanctions are appropriate for these children who have undergone longitudinal and multiple forms of abuse? For instance, should we ban "shaming" for this demographic since research clearly indicates that their self-image is fragile and that they are hyper-vigilant regarding social interaction? Finally, recent research indicates that a substantial percentage of polyvictimized children are dual-system or cross-over youth who have problems related to juvenile delinquency, child abuse and neglect (dependency), and school discipline.

This study will analyze how we should co-ordinate these often conflicting legal systems in order to maximize the deterrent, rehabilitative, punitive, and reintegration policies to assure that public safety and these psychologically troubled children's best mental health interests are both maximized?

S1-06-02 Making the invisible, visible: children born out of sexual violence

C. Prins-aardema

Fier, Albania

Human trafficking is a worldwide problem, that deeply affects the lives of those involved. Victims of trafficking are confronted with a broad range of problems (unsafety, social isolation, financial problems, legal insecurities, stigmatization). Poor mental health is a dominant and persistent adverse health effect associated with human trafficking. The (Mental) Health needs of these victims have received limited attention (WHO, 2012).

An important group remains almost invisible in justice- welfare- and Mental Health care systems: the children born out of (this) sexual violence. Research on this group is very limited, but shows a high risk for the parent child relation.

In 2014 the Centre against child- and human trafficking (CKM, <http://www.ckm-fier.nl>) has been opened. CKM aims to improve the Mental Health and overall wellbeing of the women and children admitted to the centre by integrating the services needed. CKM offers a safe house setting combined with an inpatient Mental Health treatment facility. CKM closely collaborates with the justice system to be able to advocate the needs and legal rights on an individual and group level, with special attention for the invisible victims of trafficking the (unborn) children.

The CKM develops an Infant Mental Health care program for these mothers and their (unborn) children. The program starts as early as possible, and if possible during pregnancy. All women admitted to the centre have severe MH problems (often untreated before admission), mainly caused by a complex, chronic PTSS. Many women suffer in silence. Being victimised by sexual violence makes them vulnerable to social exclusion, but being pregnant of sexual violence heightens this risk for them and their (unborn) child. The MH problems of the women are being treated. These problems do complicate their parenting capacities, but they do complicate their parenting, but the women are even more burdened by their ambivalent feelings towards their (unborn) children. They are most afraid of not being able to love their child as their child, but only to see the child as a product of rape. Therefore the program focuses on the relationship of the mother towards her (unborn) child. The treatment module aims to be of value for low and middle income countries as well.

This presentation briefly summarizes the results of literature study on this topic. More information is given on the background of the mothers and their children. The first clinical impressions and (research) goals for the future will be shared.

S1-06-03 Evidence of violence against children: parental versus child perspective

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Research has suggested that when it comes to the issue of violence against children parental and child perspectives differ significantly. Parents are either not informed or cover up the abuse of their children.

The aim of this study is to present the discrepancy between the parental and child perspective of the emotional, physical and sexual violence of their children.

Materials and methods: 1662 parent-child pairs took part in the study from the total number of 2586 children who entered the study from the primary and secondary schools in Macedonia at the age 11, 13 and 16 years in respect to their experience of physical, emotional and sexual violence—58 % girls and 42 % boys. According to age 25.6 % were 11 years old, 28.8 % were 13, 24.9 % were 16. The prevalence and incidence rate of children's exposure to emotional, physical and sexual violence and positive parenting practices suggest differences between children's and parents' perspective. Parents perceived that children are significantly more frequent victims of emotional (60.5 %) and physical (50.4 %) violence, than the children reported themselves (51 % emotional and 31.5 % physical violence). Parents also thought that children received significantly more positive parenting (89.5 %), than children themselves (74.1 %). In almost all forms of sexual violence, awareness of parents is significantly lower than children's reports of their experience. In general, parents are less aware of the sexual violence of their children, perceiving that girls are more frequent victims of such violence than boys for all forms of sexual abuse.

Conclusion: In general parents are not aware of the exposure of children to different forms of violence, or they pretend not to be aware of it, especially when it comes to sexual violence. This situation makes children very vulnerable and unprotected particularly to sexual violence.

S1-06-04 Psychosocial vulnerability in pregnant adolescents victims of domestic violence

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Thanks to FAPESP for granting a post-doctoral fellowship –post doctoral student University of São Paulo Associate Professor (PPhD) at University of São Paulo PhD Professor at University of São Paulo

Adolescence pregnancy is a complex issue that must be studied, considering the social, economic, family and the psychological aspects of each adolescent. There is more complexity when these adolescents have suffered domestic violence. Domestic violence is a serious public health problem because affects the physical and psychological integrity of the victims. Many women who become pregnant have been victims of some form of domestic violence by their partners along the married life. This paper presents data of research as part of a larger project entitled Domestic Violence Study against Adolescents Pregnant Attended at the University Hospital of São Paulo: Basis for Intervention. The objectives are to identify the accumulated incidence and the experience of pregnant adolescents in face of domestic violence, in special he psychosocial vulnerability, understanding and comparing the lived experience on the pregnant adolescents victims and not victims of domestic violence. In Fort pregnant adolescents have participated in this study, being 20 victims of domestic violence (Group 1) and 20 non-victims (Group 2) attending the University Hospital of São Paulo and another institutions partner of Psychology Institute of USP. This is an exploratory and descriptive research, quantitative and qualitative. The instruments used were: a form to characterize the profile of production and social reproduction, semi-structured interview,

The qualitative data analysis was performed according to Bardin proposal (2013) and quantitative data were seen by descriptive and bivariate analysis correlation. How results were found: In the group 1 drug use during pregnancy, and lack of trust in health professionals. The showed lack of confidence and support of family, partner abandonment and violence, insecurity, low self esteem and hopelessness. In the group 2 were found: high self-esteem; confidence and family support; security in the relationship with the partner; good prospects for the future; some unfavorable aspects were found in group 2 that were related to the fragility and vulnerability of pregnancy, as well as the inherent immaturity to the period of adolescence. This study deepened knowledge about the reality of this population, as well as contributed to the debate on the needs of pregnant adolescents victims of domestic violence. Therefore, it was observed that the group of higher risk and psychological vulnerability is that of pregnant adolescents victims of domestic violence and requires greater attention and availability of health professionals.

Key words: Adolescence pregnancy, psychosocial vulnerability, domestic violence

1 Thanks to FAPESP for granting a post-doctoral fellowship –post doctoral student University of São Paulo

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S2-01 Executive functioning as transdiagnostic factor in child and adolescent psychiatry: ADHD, OCD, and PTSD

R. Lindauer (symposium Chair), T. Dekkers (first Presenter), R. Op Den Kelder (second Presenter), L. Wolters (third Presenter), M. Van Der Donk (fourth Presenter)

Amc-de Bascule, De Bascule-uva, Amsterdam, The Netherlands

Ramón Lindauer^{1,2}, Symposium Chair

General title symposium:

‘Executive functioning as transdiagnostic factor in child and adolescent psychiatry: ADHD, OCD, and PTSD’

Title and presenters:

1. ‘Risky decision making in ADHD: a meta-regression analysis’ by Tycho Dekkers^{2,3}

2. ‘Trauma, executive function, and post traumatic stress in children: How are they associated?’ by Rosanne op den Kelder^{1,2}

3. ‘Taxing working memory: a novel intervention for adolescents with obsessive compulsive disorder?’ by Lidewij Wolters^{1,2}

4. ‘Cognitive training for children with ADHD: identifying treatment moderators’ by Marthe van der Donk^{1,2}

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S2-01-01 Risky decision making in ADHD: a meta-regression analysis

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Abstract

Background: Risky decision making in daily life is often more frequent in individuals with Attention Deficit Hyperactivity Disorder (ADHD) compared to typically developing individuals. For example, ADHD is associated with elevated levels of risky driving, unsafe sex and substance abuse. Decision making processes that underlie risky behaviors are studied in the laboratory using gambling tasks. However, results from these controlled laboratory studies on decision making deficits in ADHD are inconsistent, probably because of between study differences in (1) presence of co-morbid disorders, (2) studied age groups and (3) task characteristics (implicit vs explicit, reward vs no reward).

Methods: We performed a meta-regression analysis that investigated the influences of these three moderating effects. In total, 36 studies (N-ADHD = 1162; N-control = 1208) were included, delivering 51 effect sizes.

Results: Overall analyses without moderators indicated a small to medium effect size ($g = 0.37$, $p < 0.0001$), meaning that groups with ADHD showed more risky decision making than controls. Effect sizes however varied between studies. There was a moderating influence of co-morbid Disruptive Behavior Disorders (DBD): studies with more co-morbid DBD had larger effect sizes ($p = 0.009$). There was no moderating influence of co-morbid internalizing disorders. Effect sizes were not different for all age groups, for both implicit and explicit gambling tasks, and for rewarding and non rewarding task conditions.

Conclusions: These results confirm results from studies on real life decision making. Groups of individuals with ADHD show more risky decision making than control groups in laboratory settings, especially if the ADHD group has more participants with co-morbid DBD.

S2-01-02

Trauma, executive function, and post traumatic stress in children: how are they associated?

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Abstract

Background: This study examined whether there is a mediating or moderating role of executive function in the relationship between traumatization and posttraumatic stress in children. We investigated the link between traumatization, executive function and post traumatic stress in relation to exposure to single or chronic trauma in children. Additionally, we compared the results of a screening questionnaire for executive function and neuropsychological tasks in a subsample.

Methods: Children were recruited at an academic center for child psychiatry in Amsterdam. The total sample consisted of 119 children from 9 to 17 years old ($M = 13.65$, $SD = 2.445$). The sample was further divided in three groups based on retrospective life event information; a control group ($n = 40$), single trauma group ($n = 39$), and chronic trauma group ($n = 40$).

Results: The study revealed that chronically traumatized children had lower levels of executive function. Results also demonstrated that executive function was found to partly mediate posttraumatic stress for chronically traumatized children, but not for children exposed to single trauma. There was no moderating mechanism for executive function found. Additionally, slightly moderate associations were found between the different executive function measurement instruments in non-traumatized children. However, no significant associations were found between these instruments in the traumatized subsample.

Conclusions: We found strong indications that executive function partially mediates posttraumatic stress. This means that chronically traumatized children showed more deficits in executive function, which was associated with higher levels of posttraumatic stress. Future research should replicate these findings longitudinally, which may yield improvements for clinical practice.

Keywords: Trauma, Chronic trauma, Executive function, Posttraumatic stress, PTSD, Children.

S2-01-03

Taxing working memory: a novel intervention for adolescents with obsessive compulsive disorder?

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Background: It is plausible that performing a dual task that taxes working memory (e.g., making eye movements) while simultaneously recalling traumatic memories, is the underlying principle of eye movement desensitization and reprocessing (EMDR). EMDR has been successfully used to treat posttraumatic stress disorder (PTSD). The taxing working memory principle may also be applicable in the treatment of other disorders. For example, patients with obsessive compulsive disorder (OCD) are often plagued by intrusive and disturbing thoughts or images (obsessions). We conducted a proof of principle study to examine if performing a dual task that taxes working memory (making eye movements) while recalling an obsessive thought leads to reduced emotionality and vividness of obsessive thoughts in adolescents with OCD.

Methods: A single case experimental design (SCED) was used, which allows for analyzing results on the individual level. Five adolescents with OCD completed the one-session intervention, consisting of a recall-only phase (participants recall their most disturbing obsessive thought), followed by a recall + eye movement (EM) phase (the participants make eye movements while recalling the thought). Vividness and emotionality of the obsessive thought were repeatedly measured during both phases.

Results: Results showed that for two of the five participants the vividness of the obsessive thought was significantly stronger reduced after the recall + EM phase compared to the recall only phase (test for level of change, $p < 0.05$).

Conclusions: The present proof of principle was a first step in the development of a novel intervention for persistent intrusive thoughts in adolescents with OCD. Although preliminary, the results suggest that the taxing working memory principle may offer a useful approach for treating disturbing obsessions, at least for some adolescents. Despite the limitations of the study, these results are encouraging and may contribute to improved treatment for pediatric OCD.

Keywords: Obsessive compulsive disorder, OCD, Treatment, Obsessions, working memory, Adolescents.

S2-01-04

Cognitive training for children with ADHD: identifying treatment moderators

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Abstract

Background: Children with ADHD often suffer from deficits in executive functioning such as attentional control, inhibition and working memory. The last decade cognitive training paradigms, such as Cogmed Working Memory Training, have received increasingly more

attention as these interventions potentially improve those underlying deficits which would subsequently lead to improvements in far transfer measures such as behavior and academic performance. Despite the large amount of effect studies of working training in children with ADHD, there is still no clear consensus about the effects especially in terms of far transfer effects. However there are several indications that some individuals benefit more from training than others and these individual differences might moderate transfer outcome measures.

Methods: Hundred and two Dutch children with Attention-Deficit/Hyperactivity Disorder, between the age of 8 and 12 years, received either Cogmed Working Memory Training or a new cognitive training called Paying Attention in Class. We investigated whether executive functioning at baseline and clinical characteristics (age, medication use, co-morbidity) moderated treatment outcome. Outcome measures were neurocognitive functioning (attention, working memory, inhibition, planning and BRIEF-P/T) and academic performance (word reading, mathematics, spelling).

Results: Results showed that some clinical characteristics moderated some of the neurocognitive outcome measures. Furthermore we found that children (in both conditions) with low baseline working memory performance showed greater improvements on training related tasks than children with initial high working memory performance.

Conclusions: Our results confirm that some individuals benefit more from cognitive training than others. We suggest that identifying moderators and predictors of cognitive training has high clinical value as it could provide guidelines for clinicians in terms of treatment decision making. In stead of a trial and error treatment policy, initial adequate treatment could prevent treatment dropout and promote treatment adherence. In the long term it could even be beneficial in terms of financial and time-consuming resources of both patients and healthcare facilities.

Keywords: ADHD, Executive functions, Cognitive training, Moderators.

S2-02

Youth and mental health—a Norwegian longitudinal epidemiological study: the study and findings

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The symposium will present findings from a large, representative, longitudinal study from Mid Norway. The aim of the study was to examine risk and protective factors in the development of mental health in adolescence over to adult age with a special focus on depressive symptoms and disorders. The original sample consisted of 2464 adolescents at 22 schools in early adolescence that was followed up to adult age. The sample was selected through cluster sampling. The study has 4 assessment points, T1, mean age 13.7, T2, mean age 14.9, T3, mean age 20, and time-point 4, mean age 27.2. The main source of information was self-reports. At the T2 and T3 time-points a subsample and their parents were interviewed with the Kiddie-SADS-PL interview. In the symposium various researchers will present the study and results.

Chair: Anne Mari Sund, MD, PhD

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Presenters

1. Undheim, A.M.*a, Sund A.M.a,b. How do they cope? Coping and depression among 12-15-year-old adolescents involved in bullying.
2. Sigurdson, J.F.*a, Undheim, A.M.a, Sund A.M.a,b. Bulling involvement in early adolescence years; impact on mental health problems and use of services in adulthood.
3. Agerup, T, *a, Lydersen, S.a, Wallander, J.a.c, Sund, AM.a,b. Associations between parental attachment and risk factors in the course of depression from adolescence to young adulthood.
4. Sund A.M.a,b* Sigurdson, J.F.a, Lydersen, S a, Undheim, A.M.a, Wichstrøm, Ld. Have potential risk and protective factors in early adolescence any lasting effects on the trajectories of depressive symptoms over to adult age?

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S2-02-01

How do they cope? Coping and depression among 12–15-year-old adolescents involved in bullying

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The aim of this cross-sectional study was to examine coping styles among young adolescents involved in bullying. Further we wanted to examine the relationship between coping and bullying and their interactions on the level of depressive symptoms.

A representative sample of 2464 adolescents, mean age 13.7 (SD 58, range 12.5–15.7), in Mid Norway was assessed. Coping with stress was measured by the Coping Inventory for Stressful Situations (Endler and Parker, 1990). Depressive symptoms were assessed by the Mood and Feelings Questionnaire (MFQ) (Angold, 1989). Differences between group means were estimated using Student's t tests or one-way ANOVA with Bonferroni post hoc tests. Multiple linear regressions were performed to assess the role of bullying and coping as a predictor of depressive symptoms.

Ten percent (n = 240) of adolescents reported being victim of bullying behavior once a week or more frequently during the last 6 months. Five percent (n = 113) of the adolescents reported having been aggressive towards others "often" during the last six months. Adolescents being bullied or being aggressive towards others both showed more emotional coping than non-involved adolescents (p = 0.000). Both bullied adolescents and adolescents being aggressive towards other were different from non-involved adolescents (p = 0.000), however, not different from each other.

In the cross-sectional multivariate analyses, using MFQ as the dependent variable, and emotional, avoidance and task coping, being bullied and being aggressive as explaining variables, all three coping styles (high Emo and Avoid, p = 0.000 and low Task, p = 0.002) and being bullied and being aggressive (both p = 0.000) predicted depression, when gender, age, and SES were controlled for. This model explained 30.9 % of the variance (F = 124.18 (8, 2224) p = 0.000). Emotional oriented coping counted for half of this variance (15.6 %). Emotional coping had a possible moderating effect on

the relationship between being bullied and depressive symptom levels ($p < 0.001$). The association between being bullied and depressive symptoms was partially mediated by emotional coping among both genders ($p = 0.025$).

Conclusion: All three coping styles and being bullied and being aggressive all predicted depression, when gender, age, and SES were controlled for. Parts of being bullied's effect on depressive symptom levels were mediated by emotional coping.

Keywords: Coping, Bullying, Adolescence, Depression.

S2-02-02

Bullying involvement in early adolescence years; impact on mental health problems, psychosocial adjustment and use of services in adulthood

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The aim was to examine prospectively associations between bullying involvement at 14–15 years of age and self-reported mental health, general health and psychosocial adjustment in young adulthood, at 26–27 years of age. A large representative sample ($N = 2464$) was recruited and assessed in two counties in Mid-Norway in 1998 (T1) and 1999/2000 (T2) when the respondents had a mean age of 13.7 and 14.9, respectively, leading to classification as being bullied, bully-victim, being aggressive toward others or non-involved. Information about mental health, general health and psychosocial adjustment was collected at a follow-up in 2012 (T4) ($N = 1266$) with a respondent mean age of 27.2. Logistic regression and ANCOVA analyses were performed with gender and parent SES as covariates. Results showed that those involved in any bullying had increased levels on various mental health measures of total-, externalizing- and internalizing- and critical-problems (all $p < 0.001$) compared with those non-involved at the age of 27. Those involved in bullying had increased risk of scoring above the 90th percentile for total problem scales and internalizing problems (all $p < 0.001$). Results indicated that groups involved in bullying of any type in adolescence had increased risk for lower education as young adults compared to those non-involved (bullied OR: 1.64, bully-victim OR: 3.24 and aggressive toward others OR: 2.33, all $p < 0.01$). The group aggressive toward others also had a higher risk of being unemployed and receiving any kind of social help (OR 2.73, $p < 0.05$).

Only those being bullied in adolescence reported as young adults increased risk of receiving any help due to mental health problems during the last year (OR 1.63, $p = 0.007$), and overall in their lifetime (OR 1.94, $p < 0.001$) compared to non-involved. All groups involved in bullying in adolescence had a four to sevenfold higher risk of being hospitalized due to mental health problems life-time compared to non-involved (all $p < 0.005$).

Conclusion: Compared with the non-involved, those being bullied and bully-victims had increased risk of poor general health and high levels of pain. Involvement in bullying, either as victim or perpetrator, has significant social costs even 12 years after the bullying experience. Any involvement in bullying in adolescence is associated with later mental health problems and reduced psychosocial functioning, possibly hindering development into independent adulthood. Accordingly, it will be important to provide early intervention for those involved in bullying in adolescence.

Keywords: Bullying, Longitudinal, Outcome.

S2-02-03

Associations between attachment to parents and parental risk factors in the course of depression from adolescence to young adulthood

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Aim: A study of the associations of maternal, paternal and peer attachment as well as parental risk factors with the course of depression from adolescence to young adulthood. **Method:** In the Norwegian Youth and Mental Health longitudinal population study 242 adolescents completed the K-SADS-PL (Kiddie-Schedule for Affective Disorders and Schizophrenia-Present and Lifetime version) for depressive disorders at ages 15 and 20. Attachment was measured with the IPPA (The Inventory for Parent and Peer Attachment), separately for mother, father, and peers, at age 15. The parental risk factors were measured by parent report and the Adult Self Report (ASR). **Results:** Multinomial logistic regression, indicated insecure attachment relationships with both parents, but not with peers, and were associated with the course of depression as dependent variable. Less secure attachment to mothers was associated with becoming depressed (OR = 1.02, 95 % CI [1.00 to 1.05], $p = 0.04$). Less secure attachment to both parents was associated with becoming well (OR = 1.04, CI [1.01 to 1.07], $p = 0.002$) and remaining depressed (OR = 1.03, CI [1.01 to 1.06], $p = 0.002$). Attrition from the ages 15 to 20 years was 30 % ($n = 103$) but participants and non-participants had the same distribution of depression diagnoses at both ages. We found that for both groups who remained depressed (OR = 1.14, CI [1.04 to 1.25], $p = 0.004$) and who recovered (OR = 1.08, CI [1.00 to 1.17], $p = 0.041$) were more likely to have mothers with internalizing problems. Paternal internalizing problems was also significantly associated with the group who remained depressed (OR 1.07, CI [1.00 to 1.14], $p = 0.05$).

Conclusions: These results suggest attachment relationships with parents as potential influences on the course of depression as well as maternal and paternal internalizing problems. This may provide important information for the framework in clinical meetings with adolescents and young adults.

Keywords: Course of depression, Adolescents, Young adults, Risk factors, Attachment.

S2-02-04

Have potential risk factors in early adolescence any lasting effects on the trajectories of depressive symptoms over to adult age?

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Aim: The first aim was to study the course of depressive symptoms from early adolescence over to adult age. The second aim was to

study how potential risk factors in early adolescence predicted the course of depressive symptoms over time.

Method: In the Youth and Mental Health study a large, representative sample ($N = 2464$) of young adolescents was assessed in Mid-Norway at two time-points, at T1 (MA 13.7 years) and at T2 (MA 14.9 years) and followed up at T4 (MA 27.2 years). The response rate was 88 % at T1, 83.7 % at T2 % and 51 % at T4, respectively. Depressive symptoms were measured by the Mood and Feelings Questionnaire (MFQ). Attachment to parents was assessed with the IPPA (The Inventory for Parent and Peer Attachment). In addition other factors shown to be associated with depressive symptom levels in adolescence were included like numbers of stressful events, physical activity and demographics. Descriptives, t-tests, linear regression and general mixed model analyses with interaction were performed. Gender and SES were covariates in the mixed model analyses.

Results: The mean levels of depressive symptoms as measured by MFQ were significantly different between boys and girls at T1 (8.4 versus 12.9, $p < 0.001$). For the whole sample the depressive levels decreased from T1 to T4 (10.6 to 10.1, $p < 0.05$), and for girls (12.9 to 11.4 $p < 0.001$), while the levels were stable for boys (8.4 to 8.4, ns).

The following predictors showed associations with increasing depressive symptom levels from T1 to T2: Being a girl, MFQ levels at T1, levels of physical activity, number of stressful events, parental divorce, and attachment to mother and father, respectively (all $p < 0.001$).

Separate analyses using a linear general mixed model showed interactions between predictive factors and time on change of MFQ levels from T1 up to T4. Levels of stress ($p < 0.01$), parental divorce ($p < 0.04$) and attachment to parents ($p < 0.001$) interacted with time on change of MFQ scores. For SES and levels of physical activity no interaction effects were found.

Conclusion: These results suggest that most potential risk factors in the development of depressive symptoms early in adolescence lose their effect over time over to adult age, i.e. that the initial negative effects disappeared or diminished over time.

Keywords: Longitudinal, Risk factors, Depressive symptoms.

S2-03

Autism spectrum disorder: clinical presentation and neuropsychological performance

Chair of the symposium:

Hanna Ebeling, Professor, University of Oulu, Finland

Co-chair of the symposium:

Tuula Hurtig, Senior Research Fellow, University of Oulu, Finland
Symposium lectures (4):

1. Title: Effect of Obsessive–Compulsive and Anxiety Disorders in Autism Spectrum Disorder

Speaker: Rachel Pollock-Wurman, Massachusetts General Hospital, US

2. Title: Autism Spectrum Quotient (AQ) in a sample of Finnish young adults

Speaker: Maija Ylämäki, University of Oulu, Finland

3. Title: Symptom profiles in childhood and young adulthood in individuals with Autism Spectrum Disorder

Speaker: Tuula Hurtig, University of Oulu, Finland

4. Title: Neuropsychological performance of Finnish and Egyptian children with and without Autism Spectrum Disorder

Speaker: Sherin Elsheik, University of Oulu, Finland, and Abbasia Mental Hospital, Egypt

5. Title: Sensory processing patterns and the core features of autism spectrum disorder

Speaker: Katja Jussila, Department of Child Psychiatry, University and University Hospital of Oulu

S2-03-01

Obsessive–compulsive disorder and anxiety disorders in children with autism spectrum disorder

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Background: Autism spectrum disorder (ASD) is associated with deficits in social and emotional cognition. Research suggests an association between ASD and anxiety symptoms (Sxs) and disorders. There is a paucity of research specifically investigating the relationship between ASD and obsessive–compulsive disorder (OCD) Sxs (e.g., stereotypic behaviors, repetitive motions until it feels “just right”). In addition to clinical interview (e.g., KSADS) and self/parent-reports, information-processing (IP) methods using pictorial stimuli may be appropriate for children with cognitive/developmental delays. IP may tap into more automatic processes in anxiety states. This study aims to identify patterns of anxiety, perception and attention to relevant cues in ASD.

Methods: We divided 39 children with ASD (M age = 10.8 years) into four groups based on K-SADS-PL diagnoses of Anxiety Disorders (AD) and OCD: (1) ASD without AD or OCD ($n = 22$); (2) ASD with AD, but no OCD ($n = 6$); (3) ASD with OCD, but no AD ($n = 5$); and (4) ASD with AD and OCD ($n = 6$). These groups were compared on self-report anxiety scales (SPAI-C and SASC-R, CASI), parent reported behavior scale (CBCL and ASSQ) and a computer-based Faces in the Crowd (FIC) task measuring reaction times identifying one different facial emotion from a crowd of identical faces. Non-ASD control children were also compared between groups.

Results: In the preliminary analyses, significant differences emerged on the SPAI-C and SASC-R. We also created a new subscale, consisting of OCD items. Children with ASD + both AD and OCD scored higher on this scale than all other groups. Additionally, ASD children with an AD scored significantly higher than other groups on self/parent-reports (e.g., CBCL, ASSQ, CASI). This trend remained for children with ASD + both AD and OCD (i.e., CBCL Thought and Attentional Problems, ASSQ). The ASD + OCD group demonstrated slower reaction times on the FIC task while the group with ASD + both AD and OCD demonstrated faster reaction times on the FIC task than all other groups. Differences found in preliminary analyses with control children will be presented.

Conclusion: OCD in ASD seems to elevate the severity of the ASD (based on ASSQ), comorbid anxiety Sxs, and effect the reaction times in a decision making in emotionally relevant IP task (FIC). Children with ASD + both AD and OCD have significantly more social anxiety symptoms compared to children with ASD, but without AD or OCD. Findings will be discussed.

S2-03-02

The autism spectrum quotient (AQ) in a sample of Finnish young adults

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Background: For screening adults with ASD, there is a need for a brief self-questionnaire to be used before the time-consuming diagnoses tools. The Autism Spectrum Quotient (AQ) has been translated into Finnish but it is not clinically used at the moment. Nowadays, there is an increasing knowledge that cultural differences may affect communication and social interaction styles and thus, original norms of the tests may not be valid in different cultures.

Aims: (1) to report the scores of Finnish Autism Spectrum Quotient and research its effectiveness with Finnish young adults with and without ASD, (2) to examine core symptoms of young adults with ASD with AQ-questionnaire, (3) to find possible sex differences, and (4) to do item analysis in order to find the most challenging questions in Finnish individuals with ASD.

Methods: AQ is a 50-item self-questionnaire which has been developed by Baron-Cohen et al. (2001) for screening normally intelligent adults with ASD. For examining core symptoms of ASD, the questions were divided into two groups considering how the AQ's items go into core symptoms presented in DSM-5 diagnostic criteria, item groups being (1) Social communication deficits (29 items) and (2) Stereotypical behavior and restricted interests (21 items). Total of 41 young adults with ASD and 112 typically developing young adults (TD) participated in this study. The participants were 19–25 years old.

Results: There were significant differences between the research groups. In both groups men scored slightly higher than females but there were no significant differences. In this study, the AQ-scores were low (ASD = 22.9, SD = 8.0; TD = 13.8, SD = 6.6). Scores overlapped between research groups, due to this the cut-off point of 16 points gave 83 % sensitivity with false-positive-rate of 32 %. ASD group scored slightly more points from the social communication items (13.3, SD = 5.9), than stereotypical behavior and restricted interests items (9.6, SD = 3.3). TD group scored more points from the stereotypical behavior and restricted interests items (7.5, SD = 3.2). In item analysis there were 14 items, where ASD group scored significantly more compared to TD group.

Conclusions: Finnish results differed somewhat from English results of AQ and thus there is need for a more detailed research in Finnish adult population with and without ASD.

Keywords: Autism Spectrum Disorder, AQ, Sensitivity, Core symptoms.

S2-03-03

Continuity of symptoms of autism spectrum disorder from childhood to young adulthood

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Background: Being a developmental neuropsychiatric disorder, Autism Spectrum Disorder (ASD) has a dimension of some symptomatic change over time. In childhood, symptom profile and impairment can be evaluated in multiple settings by multiple informants, such as teachers and parents for example. In adulthood the screening for symptoms often relies on self-reports. Consequently, there is an increased need for brief and reliable self-report screening tools for adults with symptoms of ASD that could serve two purposes. First, current symptomatology guides need for diagnostic procedures, and second, it is important to study the course of ASD over time.

Aims: We aimed to study symptoms of ASD in individuals with and without ASD in childhood and in young adulthood. We studied whether there is continuity in reporting such symptoms in childhood and in young adulthood. We also studied the validity of self-reports of such symptoms by comparing self-reports to the results from diagnostic observation method (ADOS) in individuals with ASD.

Methods: The participants were derived from previous epidemiological (N = 4424) and clinical (N = 80) studies of ASD. During childhood, their teachers and parents filled in the Autism Spectrum Screening Questionnaire (ASSQ) and possible cases went through careful diagnostic examination. As part of the follow-up study in young adulthood the participants filled in the Autism Quotient (AQ). The 50 items in the AQ were divided in two categories according to dimensions in DSM-5 diagnostic criteria: (1) Social communication deficits (29 items) and (2) Stereotypical behavior and restricted interests (21 items). Total of 49 young adults with ASD (mean age 23.2 years, SD 3.6) and 1690 typically developing young adults (TD, mean age 22.1 years, SD 0.5) participated in this study.

Results: The ASD group scored higher than the TD group in all ASSQ and AQ sum scores. There were small but statistically significant positive correlations in TD group between teacher and parent reported ASSQ scores and self-reported AQ scores, both in categories of social communication deficits and stereotypical behavior. However, in the ASD group there were negligible negative correlations between those scores although young adults with ASD reported more symptoms in AQ than TD young adults. Furthermore, preliminary results indicate that young adults with ASD continued to have clinically relevant symptoms of ASD in the ADOS observation.

Conclusions: There is discrepancy between reports of symptoms of ASD between informants in different time points in our sample of individuals with ASD. These preliminary findings will be discussed.

Keywords: Autism spectrum disorder, Screening, Continuity of symptoms, ASSQ, AQ.

S2-03-04

Neuropsychological performance of Finnish and Egyptian children with and without autism spectrum disorder

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Background: Comprehensive assessment of the neuropsychological profile of children with ASD has been the focus of recent research. However, whilst most of the published evidence of neuropsychological abilities in ASD comes from single centers, studying ASD across countries is essential in identifying possible different phenotypes of ASD, and in turn designing culturally appropriate assessment tools and treatment plans. There is paucity of literatures on differences of neuropsychological features of children with ASD across countries.

Methods: We assessed neuropsychological abilities of children with and without ASD in Finland and Egypt, and examined the effect of age and IQ on these abilities. Selected verbal and non-verbal subtests

of the neuropsychological assessment NEPSY were used to examine 88 children with ASD from Finland ($n = 54$, age $M = 11.2$, FSIQ $M = 117.1$) and Egypt ($n = 34$, age $M = 8.4$, FSIQ $M = 96.6$) and 104 typically developing children (TD) (Finland: $n = 70$, age $M = 12.4$; Egypt: $n = 34$, age $M = 10.3$).

Results: Finnish ASD children scored significantly higher than children from Egypt in verbal NEPSY subtests of Comprehension of Instruction, Comprehension of Sentence Structure, Narrative Memory, Verbal Fluency, and in non-verbal NEPSY subtest of Design Fluency. Finnish TD children scored significantly higher than Egyptian TD children in non-verbal NEPSY subtests of Design Fluency and Object Memory, and in verbal NEPSY subtest of Verbal Fluency. Finnish TD children performed significantly lower than TD Egyptian children in Narrative Memory. There were no differences found in subtests of Memory for Faces, Object Recognition and Object Memory between Finnish and Egyptian ASD children, or in subtests of Comprehension of Instruction, Comprehension of Sentences Structure, Object Recognition and Memory for Faces between Finnish and Egyptian TD children. ASD children from both countries scored significantly lower than their control counterparts on Memory for Faces. Also, we found that age and VIQ can have significant influence on neuropsychological performance.

Conclusions: Our results suggest a possible cultural impact on verbal and visuomotor fluency as well as on narrative memory. Disability to remember faces seem to be typical for ASD and be independent from the culture.

Keywords: Autism spectrum disorder, NEPSY, Neuropsychology, Neuropsychological abilities, Culture.

S2-03-05

Sensory processing patterns and the core features of autism spectrum disorder

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Background: The core symptoms of autism spectrum disorder (ASD) are deficits in reciprocal social behavior (RSB) ability and restricted, repetitive patterns of behavior (RRB). Hyper- or hyporeactivity to sensory input or unusual interest in sensory aspects of the environment was included to the diagnostic criteria of ASD in the new DSM. There is a lack of evidence in the literature concerning associations between specific sensory processing patterns of autistic individuals and their core ASD features. Our aim was to establish whether hyper- or hyporeactivity to visual, acoustic, chemosensory and/or tactile stimuli in individuals with ASD is associated with the severity of their core autistic features, and whether an association between different sensory processing patterns and impairment in specific aspects of RSB could be found.

Methods: The overall RSB ability and different aspects of it (awareness, cognition, motivation, RRB) was assessed by the Social Responsiveness Scale (SRS) in 60 high-functioning children, adolescents, and young adults with ASD. Sensory hyper- or hyporeactivities were assessed through Autism Diagnostic Interview-Revised (ADI-R) and a parental questionnaire.

Results: In this sample, 91 % of the individuals with ASD presented hyper- or hyporeactivity to sensory input. Auditory hyper-reactivity was most common, followed by olfactory and tactile hyper-reactivity.

Overall, sensory hyper-reactivity was more common than hyporeactivity. To study the associations between RSB impairment and sensory dysfunction, the participants were grouped based on hyper- or hyporeactivity of individual sensory modalities and also multimodal proximal (tactile, gustatory, olfactory) or distal (auditory/visual) sensory dysfunction, and group differences investigated.

Preliminary results indicate that multimodal proximal hyper-reactivity and olfactory and auditory hyper-reactivity are associated with high SRS scores. Groups with and without multimodal proximal hyposensitivity did not differ, as did not the groups with and without multimodal distal hyper- or hyporeactivity.

Conclusions: Sensory hyper-reactivity is associated with RSB impairment. The observed avoidance and defensive behavior, limitations in social interaction, impaired ability to communicate, and stereotyped behavior typical to ASD may reflect abnormalities in sensory processing. The results provide useful information for the development of sensory-based intervention of ASD.

S2-04

Child psychiatry in a new century: what data do we use?

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Overview: After what some called the Century of the Child, we benefit today in child/adolescent psychiatry from approaches to the assessment and treatment of troubled children undreamed of a few decades ago. While we create, teach, and use these new approaches, questions arise as to the place of other kinds of data—the data on which our field “grew up”. This symposium examines these questions.

S2-04-01

Being with the patient: relationship-based data

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Abstract: Half a century ago, Erikson contrasted data obtained by examining the patient “objectively”, from a distance, with data emerging in a relationship. He called the latter “clinical evidence.” Since then, Psychiatry has seen great gains in data in the objective-descriptive tradition, while the use of relationship-based data has receded—many new graduates are even puzzled that such data exist, let alone hold the key to understanding patients. Here we will examine these two traditions, including the current use outside of Psychiatry of data obtained in relationship. We will also examine the forces within our field and in society at large that produce these results.

S2-04-02

Personalized medicine in child/adolescent psychiatry: what it should be

Bruno Falissard MD

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Abstract: The slogan “personalized medicine” affirms a worthy goal throughout healthcare. The application of personalized medicine in child/adolescent psychiatry, however, while as yet incompletely defined, is a priority as our field embraces a range of validated and useful assessment instruments and interventions, mostly depersonalized. In this presentation we will review the kinds of evidence used in child/adolescent psychiatry, from the more subjective and personalized to the more objective. Can objective assessments be personalized?

S2-04-03 Identity confusion and diagnostic categories

Speaker: Füsün Çetin Çuhadaroğlu MD

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Abstract: Adolescents suffering from identity confusion are at risk of being misdiagnosed as having a serious and persistent mental illness like bipolar disorder or schizophrenia. Such misdiagnosis occurs, given the current prominence of categorical diagnoses, when symptoms are not considered developmentally. In this presentation we will discuss three cases from the point of ‘clinical evidence’ seen developmentally and as emerging in a clinical relationship.

Discussion: The audience will be asked to respond, whether the problem described is a serious one in their countries and practices and, if so, what remedies are available.

S2-05-01 The assessment of reflective function: is self-report a really valid measure?

S. Balleespí, A. Pérez-domingo, E. Doval, N. Barrantes-vidal

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The assessment of Reflective Function: Is self-report a really valid procedure?

Balleespí, S.1, Pérez-Domingo, A.1,2, Doval, E.3, Barrantes-Vidal, N.1,2,4,5

Background: Reflective function (RF) or mentalization is the capacity to “read” the mental states (motives, feelings, wishes, needs) that underpin human’s behaviour. RF is a complex construct and can be divided in implicit/explicit, related to self/others, and cognitive/affective. A deficit in RF makes difficult to understand people reactions and to make sense of social world. Despite the growing interest in RF and its relationship with mental health, the assessment of this capacity is still not cost-efficient enough. The most accepted procedure is the Fonagy and colleagues’ Reflective Function Scale, but it requires of more than 8 h to obtaining a single score of RF. Objective: The current study analyses the reliability and validity of three candidates to be a more cost-efficient measure of RF, i.e.: the Adolescent Mentalization Interview (AMI), constructed basing on the demanding questions described by Fonagy; the Brief self-report of Reflective Function (BRF), which consists of only 4 items; and the Spanish version of the Mentalization Questionnaire (MZQ), based on 15 items that measure deficit of RF. Method: A sample of 462 adolescents aged 12 to 19 rated the self-reports of RF (i.e., the BRF and the MZQ) along with several measures of psychopathology, personality, and impairment. Approximately a half of them (256) were also

interviewed with the AMI. Results: Evidence for the reliability based on the internal structure, as well as on the test–retest (for the MZQ and the BRF), and on the inter-judges correlations (for the interview), was obtained, thus suggesting that all the three measures provide a quite precise measure of RF. However, very low correlations among the three measures, as well as between them and indicators of related constructs, impeded to provide evidence for validity. Conclusion: The lack of evidence for validity may be explained by two facts. First, the differences among the three instruments (e.g., an interview rated by trained experts versus two brief self-reports; a self-reported instrument (MZQ) referred only to own mental states and focused on deficit of RF versus measures mostly referred to others’ mental states), suggest that these instruments may be assessing different aspects of this complex construct. Second, given that low RF makes difficult to be conscious of mental states (including the lack of RF), that is, given that RF may be necessary to adequately report RF, there is the doubt about to what extent a capacity such as RF can be validly self-reported.

Keywords: Reflective function, Assessment, Cost-efficient measures, Interview, Self-report, Adolescents.

S2-05-02 Effects of group psychotherapy on reducing depression in late adolescents

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Introduction: In our Clinic we have Youth Club as a form of group psychosocial treatment, with psycho-educative, psychotherapy and creative approach. Group leaders are therapists with training in different psychotherapeutic modalities, so the work is integration of psycho-education, cognitive-behavioral and psychodynamic elements and psychodrama.

Objectives: To determine changes in the level of depression in patients who were on therapy for the treatment of affective disorders. Also, the qualitative analysis of the effects of continuous group psycho-education, effects in relation to the experience of stigma, as well as their overall mental functioning.

Methods: During 5 years of continuous work in the group were involved over 100 late adolescents of both sexes. The group works once a week for 90 min. The group is “semi-open”, which means continuous inclusion of patients who were evaluated by competent psychiatrists to meet the basic criteria: age 18–26 years, satisfactory remission of various psychotic or affective disorder, or signs of neurotic or stress related disorders, particularly adjustment disorders. In total, 63 patients, of the 100 patients, were passed through the group treatment for a period of 6 months or more. In 32 patients (out of 63) there were presented affective disorders, 18 patients were in remission of psychotic disorders, and 13 patients were represented neurosis or stress-related disorders (according to ICD-10.) In the beginning and also after the 6 months, we gave Beck questionnaire for depression, BAI anxiety inventory, and Rosenberg scale of self-confidence and self-esteem, to all patients.

Results: In the group of 32 patients with affective disorders, over a period of 6 months, there was a decrease score on a scale for depression, at the beginning the mean value was 29, and after 6 months: 14 points. In the remaining 31 patients, there wasn’t showed significant change in the number of points on the questionnaire for depression. However, using the Rosenberg scale of self-confidence and self-esteem, positive changes were observed in all patients. All patients on

continuous group therapy, show positive changes in thinking, feelings, self-esteem, behavior and personality traits, as well as significantly increase the fund of knowledge in various fields relevant to everyday life, reduction of stigma and experience of better functioning.

Conclusion: Continuous group psychotherapy showed significant positive effects on the course of therapy, creative problem solving, building teamwork, acceptance of differences and experience of stigma reduction among young people with mental disorders.

S2-05-03

Think family—whole family programme: improving the outcomes for families affected by parental mental illness

L. Gatsou, S. Yates, G. Fadden, N. Goodrich, D. Pearson

Child and Adolescent Mental Health Services, Leicestershire Partnership Nhs Teaching Trust, Leicester, Uk; De Montfort University, Leicester, Uk; Meriden Family Programme, Birmingham And Solihull Nhs Foundation Trust; Pier Team, Leicestershire Partnership Nhs Teaching Trust, Leicester, Uk

Conference Theme

Developmental Trajectories and Outcomes
Subheading

Children of Parents with Mental Illness

Keywords: Parents with mental illness, Children of parents with mental illness.

Presentation Title

Think Family—Whole Family Multi-Agency Training and Intervention: Improving the Outcomes for Families Affected by Parental Mental Illness

Abstract: Children of parents with mental illness are at significantly increased the risk of developing a mental illness diagnosis and experiencing a range of other behavioral, interpersonal, academic and other difficulties. The links between poverty, mental ill health, discrimination and social exclusion are compelling and any attempt to improve the life chances for patients who are parents and their children must consider the family context of adults with mental illness. These issues emphasise the need for effective work with the whole family. However, such programmes remain rare globally, and certainly in the UK there are no unified training packages for health, educational and social care sectors in an evidence based family intervention for families affected by parental mental illness.

The Think Family—Whole Family is a training programme and eight-session family intervention protocol for multi-agency professionals that was delivered and implemented in 2012–2013. 100 frontline professionals from more than 20 different services from health, education, social care and voluntary sector have been trained in this evidence based family intervention, and 31 families worked with professionals using the designed intervention.

This presentation explores findings from evaluation of this programme and research with professionals and families to identify the ways that PMI impacts family members and family life, challenges to engaging and working with families where there is PMI, and evidence of effective practice and routes to positive outcomes. Key findings include: (i) a complex range of effects of mental health stigma that affect families in discouraging communication about distress both within and outside families, foster social isolation and inhibit help-seeking, and that also affect professionals in inhibiting the discussion of mental health even where they know or suspect it is a contributing factor to families' negative circumstances; (ii) prior to training there was generally poor understanding of the impacts of PMI and of what whole family work entails; (iii) the importance of improving the confidence of professionals

who are not mental health specialists; (iv) there are significant impacts of PMI on family relationships and communication, with differing understandings of the illness held by different family members and considerable strain particularly on the parent–child relationship; and (v) significant positive outcomes were achieved with families, and these were consistently mediated through improvements in family communication and relationships that professionals were able to achieve using the programme's tools. Implications and proposals for future work with families with PMI are discussed in conclusion.

S2-05-04

Quality indicators for outpatients: from clinical knowledge to systematic review of the evidence

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Keywords: Quality assessment, Outpatient services.

Background: Measuring the quality of mental health care has the potential to enable professionals and policy makers to monitor and improve care: it is a clinical, scientific and policy issue. However, what constitutes good quality of care in outpatient psychiatry and psychotherapy as well as its appropriate assessment must still be determined. This is particularly true for the child and adolescent mental health services (CAMHS).

In Switzerland, child and adolescents mental health care is traditionally provided jointly by private practitioners and medical institutions. Private practitioners mainly provide psychotherapy, while public and university services assume the responsibility for primary mental health care, preventive initiatives, and counseling for families with severe and complex psychosocial and mental health problems. The financing of the care is guaranteed by an obligatory public insurance and more complex psychosocial interventions partly by the cantons. The routine assessment of quality (efficacy, efficiency, and cost effectiveness) is generally required by the Swiss Law of Medical Insurance, but common indicators for outpatient services aren't defined yet. The Swiss Society of Child and Adolescent Psychiatry and Psychotherapy (SSPPEA) set an initiative with a permanent commission for quality by the Swiss Federation of Medical psychiatrist and psychotherapy (FMPP) in order to be able to make recommendations for quality indicators in outpatient services.

Method: The aim was to define the quality indicators for outpatient mental health care for children and adolescents. The professional board chooses a double approach to explore this issue:

1. focus groups with clinical experts
2. systematic review of the evidence of quality indicators for outpatient mental healthcare.

Results: Current studies indicate that many quality indicators can be used for quality assessment in outpatient CAMHS. They can help assess quality of structure, process or outcome. However, to date, the psychometric evidence of quality indicators is weak. In child and adolescent psychiatry the challenge is to take into account developmental issues when establishing quality indicators.

Using clinical expertise and scientific knowledge highlight the importance of the different levels of quality assessment: individual (patient-centered), organizational (services), and policies. This distinction between the different levels of quality assessment will be

very useful to investigate the appropriateness of indicators in different outpatient contexts and in different

S2-06-01

Association of a low vitamin D level with mental health problems in a representative German sample of children and adolescents

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Low vitamin D levels have repeatedly been found to be associated with mental health problems in childhood and adolescence (e.g. Tolppanen et al., 2012; Kamal et al., 2014). In the present study associations between vitamin D levels and mental health problems measured by the Strengths and Difficulties Questionnaire (SDQ, parent rating) were analyzed using data from the German Health Interview and Examination Survey (KiGGs).

An age-adjusted logistic regression analysis revealed significant negative correlations between vitamin D values and the SDQ-subcales emotional problems, peer-problems and the total difficulties score for boys (N = 4713; vitamin D level [nmol/l]: mean (M) = 46.72; standard deviation (SD) = 27.87) and girls (N = 4517; vitamin D level [nmol/l]: M = 46.21; SD = 25.56) and conduct problems only for girls.

The strongest association was found for low vitamin D levels and peer-problems in girls: The risk of having borderline or abnormal levels of peer-problems decreased 11.8 % (95 % confidence interval: 8.1–15.6 %) per SD of the vitamin D level ($p < 0.001$).

For all the aforementioned scales the odds ratios are smaller than 1, so all effects point in the same direction.

In a SES and age-adjusted model correlations for all scales slightly decreased. A part of the association between a low vitamin D level and mental health problems is thus seemingly explained by SES.

In the fully adjusted model, only the effect for peer-problems remained significant for the girls. In contrast, in boys the effects for emotional problems, peer-problems and the total difficulties score persisted.

Based on our cross-sectional design we cannot infer causality. The mechanisms underlying the association between mental health problems and vitamin D warrant further studies.

References:

Kamal M, Bener A, Ehlayel MS (2014) Is high prevalence of vitamin D deficiency a correlate for attention deficit hyperactivity disorder? *Atten Deficit Hyperact Disord* 6:73–78

Tolppanen AM, Fraser WD, Lewis G, Zammit S, Lawlor DA (2012) The association of serum 25-hydroxy vitamin D3 and D2 with depressive symptoms in childhood—a prospective cohort study. *J Child Psychol Psychiatry* 53:7:757–766

S2-06-02

The role of narcissism and empathy in predicting different dimensions of aggressive behavior in adolescents

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Introduction: Aggression is heterogeneous construct, splitting, for example, into the two dimensions of a reactive and a proactive

function of aggression. Personality traits like callous-unemotional traits or pathological narcissism play an important role in the development of aggressive behaviour. However, only few studies have examined the significance of these two traits for the development of aggressive behaviour in young people. The present investigation examined the importance of cognitive and affective empathy and vulnerable and grandiose narcissism in predicting proactive and reactive aggression.

Method: 137 participants (mean age 17.6 years, SD: 1.69; female 24.1 %) completed the German version of the Pathological Narcissism Inventory (PNI), the Reactive and Proactive Questionnaire (RPQ) and the Multifaceted Empathy Test (MET).

Results: Proactive aggression was associated with grandiose narcissism ($r=0.18$) and affective empathy ($r=-0.292$), reactive aggression only with vulnerable narcissism ($r=0.332$). Regression analysis reveals, that proactive aggression was predicted independently by deficits in affective empathy ($\beta -0.169$) and grandiose narcissism ($\beta 0.267$) when controlling for reactive aggression and social desirability. However, effect sizes were small ($\Delta R 0.035$ respectively 0.053). Reactive aggression was predicted by vulnerable ($\beta 0.371$) and grandiose narcissism ($\beta -0.223$) when controlling for proactive aggression and social desirability.

Discussion: Our results confirm earlier findings that narcissistic personality traits play an important role in the development of aggressive behaviour, especially grandiose narcissism in proactive aggression. The results remain stable when controlling for empathy. Deficits in affective empathy predicted proactive, but not reactive aggression independently from narcissistic personality traits.

S2-06-03

Social information processing in children with conduct problems

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Background: A deficit in social information processing has been discussed to underlie conduct problems (CP) in childhood and adolescence. While some sub-processes of social information processing, such as emotion recognition, have been studied more extensively, others have been neglected so far. Furthermore, past research resulted in partially inhomogeneous results demonstrating group differences as well as comparable results between children with CP and typically developing children. Here, subgroup analyses indicate gender as well as callous-unemotional (CU) traits as relevant mediators. Therefore, the aim of the current study is to assess different fields of implicit and explicit social information processing in children with CP and typically developing children taking gender as well as CU-traits into account.

Methods: Children and adolescents with CP (N = 75) are compared with typically developing participants (N = 75). Gender and CU traits are taken into account differentiating between boys and girls as well as participants with high versus low CU traits. To assess implicit social information processing, a subliminal emotional priming paradigm is adopted. Allocation of attention is being measured with an emotional stroop task. As explicit measures served an emotional memory task as well as a social attribution task.

Results: Data indicating significant group differences in regard to all factors, group, gender, and CU traits are presented. While children with CP and low CU trait evaluate subliminally presented negative social stimuli as more attractive than typically developing children, those with

CP and elevated CU show differences in explicit emotion attribution. These results were more pronounced for boys compared to girls.

Conclusion: Results of the current study indicate social information processing differences in children with CP beyond emotion recognition. CU traits and gender display important factors that influence performance. This complex profile of differences has to be taken into account when planning effective treatment strategies.

S2-06-04

Behaviour problems in children—a longitudinal study of genetic and environmental factors

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Behavioural problems in children are risk factors for later adaption and mental health problems. Both constitutional and environmental factors have been shown to influence the development of behavioural problems and psychiatric disorders, and during the last decade the interest in gene-by-environment models has increased. However, the results of studies using such models have turned out to be inconclusive, and very few of the studies include children.

The aim of this study was to examine the effect of the serotonin transporter gene-linked polymorphic region (5-HTTLPR) and the Brain Derived Neurotrophic Factor (BDNF) single nucleotide polymorphism Val66Met by life events on internalizing and externalizing symptoms in a cohort of 889 children. The children and their mothers were followed from pregnancy to age 12. The mothers reported on depressive symptoms 3 months postpartum and at the child's age 12. Child behaviour and experiences of life events were assessed at ages 3 and 12 by the mothers. Socioeconomic information was retrieved at the child's age 3 months, 3 years and 12 years. Child saliva samples were used for genotyping the 5-HTTLPR and BDNF Val66Met polymorphisms. Multiple logistic regression was used to investigate the association between psychological scales and genetic polymorphisms.

At age 3, maternal symptoms of postpartum depression increased the risk of internalizing and externalizing problems (OR 3.27, CI 1.77–6.03; OR 3.05, CI 1.74–5.35). Experience of multiple life events also predicted internalizing and externalizing problems (OR 2.36, CI 1.07–5.22; OR 5.01, CI 2.68–9.35). Children of immigrants had an increased risk of internalizing problems (OR 2.10, CI 1.10–4.03).

At age 12, concurrent maternal symptoms of depression increased the risk of internalizing and externalizing problems (OR 5.75, CI 3.31–9.99; OR 5.47; CI 3.40–8.78). Carriers of two short alleles (s/s) of the 5-HTTLPR had an increased risk of internalizing problems compared to l/l carriers (OR 4.63, CI 2.09–10.23). Psychosocial stress at 3 months increased the risk for internalizing problems (OR 3.29, CI 1.37–7.91). No gene-by-environment or gene-by-gene-by-environment interaction was found either at age 3 or 12.

In summary, this study further illuminates the importance of socio-environmental factors for child wellbeing. Maternal symptoms of depression were associated with increased risk of behavioural problems in children, which need to be taken into account in clinical practice. Furthermore, we found a main effect of 5-HTTLPR on internalizing symptoms in 12 year old children, confirming the importance of the serotonin system for internalizing/depressive symptoms and indicating a need for future studies.

S3

Psychotherapy for emerging borderline personality disorder

Fonagy P

University College London

Despite past controversies concerning the desirability of diagnosing borderline personality disorder (BPD) in adolescence, accumulating epidemiological and clinical data amply support the reality of the diagnosis. In addition, evidence is accumulating on the similarities and differences between the clinical features and pathogenesis of BPD in adolescents and in adults. The treatments of choice for adult BPD are psychological therapies. There is no reason to suppose that emerging BPD in adolescents should not be approached in the same way. In this presentation, the evidence base for manualized psychological therapies will be reviewed, with particular reference to Dialectical Behaviour Therapy, Cognitive Analytic Therapy and Mentalization-Based Treatment. Rather than considering the relative effectiveness of these treatment approaches, the presentation will focus on (1) the elements that are common to these approaches, in the hope of arriving at an integrated model of why treatments work, and (2) the importance of a therapeutic approach which reinforces the young person's capacity to benefit from benign aspects of their social environment. Despite our relative ignorance about the mechanisms of change that psychological therapies promote, there is sufficient evidence of short-term benefit from psychological therapies to warrant a change of practice – pointing to early identification and diagnosis-specific intervention for emerging BPD.

S4-01

Adolescent attachment: From brain to culture

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In contemporary societies, adolescence has become a topic of serious preoccupation. This concern is brought about by increasing mental health issues in youths, by more frequent physical assaults perpetrated by youths, and by the explosion of violence in schools, amongst other factors. Critically, these factors influence the developmental processes of social cognition sustaining resilience, and perhaps most notably mentalization, i.e. the capacity to understand human behaviour as motivated by intentional mental states (desires, feelings, beliefs, etc.). Starting from the dynamic encounter between post war sociological and psychological factors slowly transforming socialisation processes in youths, we hypothesize that novel attachment modalities arise during adolescence, which profoundly affect the consolidation of mental health or the emerging risk to mental disorders. Critically, the factors involved may exert a detrimental effect on “epistemic trust” as a vector of access to social and cultural knowledge. We argue that the weakening socialising influence of vertical institutions (Family, School, Religion,

State, Nation, etc.) and, consequently, the uprising of autonomous social norms in youth groups lie at the epicentre of this historical shift.

From this conjecture, we suggest that a focus on the different levels of analysis (biopsychosocial) relevant to adolescent attachment may help bridge the gap between a historically static view of the biological adolescent to the dynamically changing realities of contemporary adolescents. In its various forms, psychopathology presents an increasingly common obstacle to adapting and learning in new social environments. Beyond symptom expression, the most preoccupying outcome of psychopathology may be the rigidity in psychological and social functioning it sustains, preventing affected youth and young adults from developing adaptive and flexible ways of functioning in increasingly demanding and competitive environments. As the categorical approach to mental disorders will benefit from new perspectives on dimensional expression, contemporary neurodevelopmental models may seize the opportunity for integration with the psychological and social dimensions that are susceptible to sculpt the neural networks towards sustaining health and resilience in today's youths.

S4-02

Bullying victimization and response to stress in children and adolescents

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Background: Evidence from animal and human studies suggests that early adverse experiences such as maltreatment and bullying victimization have long-lasting effects on the hypothalamic-pituitary-adrenal (HPA) axis. However, uncertainty remains about the causal effect of these experiences in humans as no previous investigations controlled for genetic and shared-environmental influences. We tested whether bullying victimization affected cortisol reactivity using a discordant monozygotic (MZ) twin design and its impact on development.

Methods: Thirty pairs (43.3% males) of 12-year-old twins discordant for bullying victimization were identified in the E-Risk Study, a nationally-representative cohort of families with twins. We ascertained bullying using mothers' and children's reports, maltreatment using mothers' reports and children's behavioral problems using mothers' and teachers' reports.

Results: Bullied and non-bullied MZ twins showed distinct patterns of cortisol reactivity. Specifically, bullied twins exhibited blunted responses compared to their non-bullied MZ co-twins who showed the expected cortisol increase. This difference could not be attributed to children's genetic makeup, familial environments or pre-existing and concomitant individual factors. We subsequently showed in a larger sample (50.5% males; including discordant and non-discordant pairs) that maltreated/bullied children ($n=64$) also had lower cortisol responses in comparison to controls ($n=126$). Importantly, blunted responses were associated with more social and behavioral problems among maltreated/bullied children.

Conclusion: Results from this natural experiment support the enduring effects of early-life stress on cortisol reactivity. Moreover, our follow-up study showed that blunted responses may signal social and behavioral problems in maltreated/bullied children. The underlying role of DNA methylation will be discussed.

S4-03

Management of anxiety disorders in children and adolescents

Creswell C

School of Psychology and Clinical Language Sciences. University of Reading

Anxiety disorders in childhood and adolescence are common and often associated with lifelong psychiatric disturbance, yet families often struggle to access evidence based treatments. Psychological treatments for these disorders have been developed, in particular cognitive behaviour therapy (CBT) and this is typically considered to be the optimal first-line treatment approach. A particular advance in recent years is the development of low intensity versions of CBT interventions that offer a means to increase access to evidence-based treatments. This state of the art lecture will give an overview of current best practice in the management of anxiety disorders in children and adolescents. This will include findings from two recent randomised controlled trials of brief CBT approaches: (i) parent-led CBT for anxiety disorders in childhood, and (ii) online CBT for adolescents with anxiety disorders. Implications for a stepped care approach to the treatment of anxiety disorders in children and young people will be considered as a means to optimize access to effective treatments.

S5

Abstract lecture "Attention Deficit Hyperactivity disorder and Autism Spectrum Disorders: two manifestations of one overarching disorder?"

Buitelaar J

Radboud University Medical Centre, The Netherlands

Autism Spectrum Disorders (ASD) and Attention-Deficit / Hyperactivity Disorders (ADHD) are neuropsychiatric developmental disorders that frequently co-occur (Rommelse et al., 2010). The frequent comorbidity of both disorders is likely due to substantial overlap in genetic factors, cognitive dysfunctions, and functional and structural brain characteristics between ASD and ADHD (Rommelse et al., 2011). Both disorders are also hypothesized to share a common precursor, i.e. early deficits in executive attention (Johnson et al., 2015). This lecture will review the evidence for shared and unique genetic, cognitive and neural factors that are involved in ASD and ADHD and will argue that ADHD and ASD may be both manifestations of one overarching neurodevelopmental disorder. The last part of the lecture will discuss clinical implications of this view and outline further approaches for research, including intervention and prevention.

Jan K. Buitelaar

S6-01

Suicidal and self-harm in adolescence

Y. Gvion, A. Apter

Bar Ilan University, Tel Aviv, Israel; Schneiders Children Medical Center, Tel Aviv, Israel

Suicidal and self-harm in adolescence

Chairman: Yari Gvion PhD and Prof. Alan Apter

There will be 5 speakers:

1. Michael Kaess, MD

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S6-01-01**The prospective relationship between adolescent self-injury, suicidal behaviour and borderline personality disorder**

Michael Kaess, Peter Parzer, Gloria Fischer, Jenny Park, Franz Resch, Romuald Brunner

Background: Adolescent self-injury is a major public health concern and has gained increased attention during the past decade due to its potential association with suicide attempts and major psychiatric disorders. The aim of this talk is to present prospective data on the course of adolescent self-injury and its association with suicide attempts and the development of borderline personality disorder.

Methods: 514 adolescents (mean age 15 years) were followed for two years as part of the Saving and Empowering Young Lives in Europe study and its consecutive follow-up. Self-injurious behaviour was assessed using a short version of the Deliberate Self-Harm Inventory. Suicidal behaviour was assessed using the Paykel Suicide Scale. Borderline Personality Disorder was assessed at two-year follow-up using the SCID-II. Based on the course of self-injurious behaviour, adolescents were divided into the following groups: no lifetime self-injury; late onset of self-injury; remission of self-injury; maintenance of self-injury.

Results: At the two year follow-up, 88 adolescents (17.2 %) still reported self-injurious behaviour but this rate was significantly lower compared to baseline assessment. A group of 50 adolescents (9.8 %) had maintained self-injurious behaviour during the 2 years. This group was at high risk for suicide attempts and borderline personality disorder. 119 adolescents (23.2 %) belonged to the group who had remitted from self-injury. This group presented with low risks of suicide attempts and lower borderline personality pathology.

Discussion: A large proportion of self-injuring adolescents does remit during the course of adolescence. Maintaining self-injury, however, indicates high risk for subsequent suicidal behaviour and the development of borderline personality disorder.

2. Pilar A Saiz, MD, PhD

Department of Psychiatry, University of Oviedo-CIBERSAM. Oviedo, Spain; Department of Psychiatry. School of Medicine. Julian Claveria 6-3°, 33006 Oviedo, Spain

Abstract: Suicide is one of the most important causes of death in the age group 15–34 and ranks as the second cause of death after traffic accidents and other injuries in the ages 15–19. In Europe each year, approximately 13,500 young men and women aged 15–24 years die by suicide. There is proved evidence that suicidal behaviour coincides with many underlying psychological and psychiatric conditions. Adolescence is the key age for the onset of several mental health problems and is a crucial period for the establishment of healthy lifestyles and emotional well-being. The number of immigrants to European countries has significantly increased over the past decades. The impact of the migratory process seems to be influenced by different factors including socioeconomic condition, ethnic discrimination or acculturation. On the other hand, previous data suggest that immigration might be associated with mental health problems in young people, especially females.

The main objective of this talk is to determine the role of the immigration and its impact in lifestyles, mental health and well-being in European adolescents.

3. Carli, V, MD

Karolinska Institutet, National Centre for Suicide Research and Prevention of Mental Ill-Health, Sweden, Psychiatry.

4. Apter, A. MD

Schneiders Children's Medical Center of Israel, Petah Tikva, Israel

S6-01-02**Explicit motives, antecedents and consequences of non suicidal self injury—a longitudinal study in a community sample of adolescents**

Avigal Snir^{1,2}, Alan Apter¹, Vladimir Carli³, Danuta Wasserman³

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Abstract: The current study aimed to expand our understanding of motives for Non suicidal self-injury (NSSI). We examined the explicit (stated) motives for these behaviors, but also the actual antecedents/consequences of NSSI over time which enabled us to infer about motives that were not explicitly endorsed. We addressed internal as well as interpersonal motives and explored the inter-relations between these domains.

The participants were adolescents between the ages 14–18 from 12 high schools in Israel. Self-report questionnaires were administered in baseline, 3-month and 12-month follow-ups. We examined 5 classes of explicit motives for engaging in NSSI, and found that internal and interpersonal motives were reported in similar frequencies. We then used linear hierarchical regression models to examine the internal and interpersonal antecedents/consequences of NSSI over time. Decreases in peer and parental support predicted later increases in levels of NSSI, an effect mediated by negative affect. Surprisingly, both peer and parental support also exerted quadratic effects on NSSI. Thus, low as well as high support predicted higher levels of subsequent NSSI. In turn, NSSI was followed by increased peer and parental support.

The findings point to interesting avenues for future research regarding sub-groupings of adolescents who self-injure -whose motives may differ depending on the levels of social support. Additionally, our results reveal that NSSI, though of negative import, might paradoxically be effective in serving certain functions (i.e., gaining social support). Better understanding of the motives for NSSI, may point researchers and clinicians more specific and effective prevention and intervention programs.

5. Gvion, Y. PhD

Bar-Ilan University, Ramat Gan, Israel

S6-01-03**Meetings with people who wish to die**

Yari Gvion PhD

Abstract: Treatment of a suicidal patient is an experiential journey for both the patient and the therapist, into the regions of mental pain. Confronting the wish to die resonates with complex emotions, and only coping with these emotions and their intensity will enable the

therapist to be empathetic (rather than confrontational) with the patient's death wish. This therapeutic empathy will enable access to the intense emotional pain and lead to the possibility of a therapeutic process. This presentation will discuss the hindrances faced by the therapist when he/she encounters a suicidal patient who has taken action in this regard. The presentation will present excerpts of intervention based on in-depth interviews conducted with five patients who attempted suicide in their teens, and two therapists.

S6-02 Novel stimulant and non-stimulant approaches to the long-term treatment of ADHD in Europe

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Amaia Hervás (Chair)

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S6-02-01 Long-term treatment with ADHD medications: open-label studies

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Approved pharmacotherapies for attention-deficit/hyperactivity disorder (ADHD) are characterised as either stimulants (including methylphenidate and amfetamine) or non-stimulants (including atomoxetine and guanfacine). The efficacy of ADHD medications has been established primarily in short-term clinical trials. Open-label studies of at least 6 months duration have been conducted with the primary aim of establishing the long-term safety of ADHD medications, whilst also demonstrating their continued effectiveness.

Commonly-reported treatment-emergent adverse events (TEAEs) in long-term trials of stimulant medications in both paediatric and adult patient populations with ADHD are similar to those reported in short-term, randomized, controlled trials. Characteristic of the tolerability profile of stimulants, TEAEs commonly reported by both children and adults during 12-months, open-label treatment with the long-acting, d-amfetamine prodrug lisdexamfetamine dimesylate (LDX) included decreased appetite, insomnia and headache. Anorexia and weight loss were more common in children than in adults [1, 2, 3]. Safety and efficacy outcomes will be presented from a recently completed, 2-year, open-label study of LDX in children and adolescents with ADHD.

TEAEs associated with long-term, open label treatment of patients with the non-stimulant atomoxetine included decreased appetite, somnolence, headache and fatigue [4, 5]. Children and adolescents receiving the selective α 2A-adrenergic receptor agonist guanfacine extended release (GXR) for 2 years reported somnolence, headache and fatigue, although somnolence and fatigue were usually transient

[6, 7]. Interim data from a 2-year, open-label, extension study of GXR in children and adolescents with ADHD will be presented.

Overall, TEAEs associated with all ADHD medications were mild or moderate in severity and consistent with the mode of action of the drug and treatment discontinuation tended to be associated with inadequate response rather than lack of tolerability.

Long-term studies have confirmed that all medications available in Europe are generally safe and well tolerated, however continued monitoring is an essential aspect of individual patient follow-up.

1. Findling RL et al (2008) *CNS Spectr* 13:614–20
2. Weisler R et al (2009) *CNS Spectr* 14:573–85
3. Coghill DR et al (2014) *CNS Drugs* 28:497–511
4. Adler et al (2005) *J Clin Psychiatry* 66:294–9
5. Kratochvil CJ et al (2006) *J Am Acad Child Adolesc Psychiatry* 45:919–27
6. Biederman J et al (2008) *CNS Spectr* 13:1047–55
7. Sallee FR et al (2009) *J Chile Adolesc Psychopharmacol* 19:215–26

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S6-02-02 Randomized-withdrawal studies of the maintenance of efficacy of ADHD medications

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In a chronic condition such as attention-deficit/hyperactivity disorder (ADHD), the demonstration of the maintenance of efficacy of drug treatment is essential and regulators require randomized-withdrawal (RW) studies to demonstrate the benefits of continued ADHD treatment. Within the rigor of a randomized and controlled setting, RW studies enable the effects of medication to be isolated from other factors which impact outcomes in a study of longer duration.

RW studies have established the maintenance of efficacy of several stimulant and non-stimulant ADHD medication, including lisdexamfetamine dimesylate (LDX), osmotic-release oral system methylphenidate (OROS-MPH), atomoxetine (ATX) and guanfacine (extended release; GXR). During a 6-week RW period, 15.8 % of children and adolescents with ADHD receiving the long-acting, d-amfetamine prodrug LDX met treatment failure criteria compared with 67.5 % receiving placebo [1]. In adults with ADHD, RW studies of OROS-MPH indicated a numerical but non-significant return of symptoms in patients withdrawn to placebo compared with those maintained on active treatment [2, 3]. During a 9 month RW study of the non-stimulant atomoxetine in patients aged 6–17 years, 22.3 % receiving ATX relapsed compared with 37.9 % receiving placebo [4]. A study evaluating the maintenance of efficacy of the selective α 2A-adrenoceptor agonist GXR in children and adolescents with ADHD using a RW design has recently been completed and results will be described [5].

The primary efficacy outcomes of these RW studies provide evidence that treatment must be continued in order for efficacy to be maintained. Although RW of both stimulant and non-stimulant ADHD medications results in a return of symptoms, the rate and delay of symptom return may differ between these classes of treatment. Periodic trials off medication may be important to determine whether

treatment is still necessary. Finally, it is important to note that follow-up studies of youth in the US Multimodal Treatment Study of Children with ADHD suggest that long-term outcomes depend not only on treatment but on a host of individual, family and contextual factors [6]. Consequently, careful individualized management of patients is required.

1. Coghill D et al (2014) *J Am Acad Child Adolesc Psychiatry* 53:647–57
2. Buitelaar JK et al (2012) *Int J Neuropsychopharmacol* 15:1–13
3. Biederman J et al (2010) *J Clin Psychopharmacol* 30:549–553
4. Michelson D et al (2004) *J Am Acad Child Adolesc Psychiatry* 43:896–904
5. Newcorn J et al (2014) *Eur Psychiatry* 29:1
6. MTA Study Group (2009) *J Am Acad Child Adolesc Psychiatry* 48:484–500

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S6-02-03

Health-related quality of life and functional impairment outcomes in studies of ADHD medications

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Optimal management of ADHD aims to relieve symptoms and improve health-related quality of life (HRQoL) and functioning. We explore results from trials of stimulant and non-stimulant medications in children and adolescents with ADHD that incorporated the Child Health and Illness Profile–Child Edition: Parent Report Form (CHIP-CE:PRF), a generic HRQoL measure, and the Weiss Functional Impairment Ratings Scale: Parent Report (WFIRS-P), an ADHD-specific functional measure.

The CHIP-CE:PRF and WFIRS-P instruments have been utilized in several trials of non-stimulant ADHD medications. A meta-analysis of three 8–12-week, placebo-controlled trials of atomoxetine found improvements in the CHIP-CE:PRF Risk Avoidance (effect size 0.489) and Achievement (0.431) domains [1]. During long-term, open label treatment with atomoxetine, improvements in CHIP-CE:PRF T-scores and WFIRS-P scores were stable from 6 to 12 months [2]. In a 7-week, randomized, parallel-group study, both guanfacine extended release (GXR) and the reference treatment atomoxetine led to improvements in WFIRS-P total score (effect sizes 0.44 and 0.28, respectively) [3]. After 26 weeks randomized withdrawal, continued GXR treatment was significantly more effective than placebo in maintaining improvements in the WFIRS-P Learning and School domain (0.27) [4].

The first trial of a stimulant medication in children and adolescents with ADHD to incorporate the CHIP-CE:PRF was a 7-week, randomized, parallel-group study which found that lisdexamfetamine dimesylate (LDX) and the reference treatment osmotic-release oral system methylphenidate (OROS-MPH) led to significant improvements from baseline to endpoint in Achievement (effect sizes 1.280 and 0.912), Risk Avoidance (1.079, 0.948), Resilience (0.421, 0.398) and Satisfaction (0.365, 0.349) domains [5]. WFIRS-P total scores were also improved for both treatments (LDX, 0.924; OROS-MPH 0.772) [5]. After 6 weeks randomized withdrawal of LDX, continued treatment was significantly more effective than placebo in maintaining improvements in CHIP-CE:PRF Risk Avoidance (effect size

0.829), Achievement (0.696) and Satisfaction (0.636) domains and WFIRS-P total score (0.908) [6].

Conclusion: Evidence from long-term studies indicates that therapy induced improvements in HRQoL and functional outcomes seen in the short-term are maintained with continued treatment.

References

1. Escobar R et al (2010) *J Clin Psychopharmacol* 30:145–51
2. Fuentes J et al (2013) *J Clin Psychopharmacol* 33:766–74
3. Hervas A et al (2014) *Eur Neuropsychopharmacol* 24:1861–72
4. Newcorn J et al. *Brit J Psychiatry*. Manuscript submitted
5. Banaschewski T et al (2013) *CNS Drugs* 27:829–840
6. Banaschewski T et al (2014) *CNS Drugs* 28:1191–203

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S6-02-04

Different modes of action of ADHD medications. How can we explain maintenance of effect?

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Psychostimulants increase synaptic concentrations of dopamine and noradrenaline in the brain by blocking their reuptake and/or increasing their release. Atomoxetine (ATX), the only non-stimulant currently approved in Europe for the treatment of ADHD, increases extracellular noradrenaline concentrations by selectively inhibiting its reuptake [1]. A second non-stimulant treatment option in cases when stimulants may be unsuitable because of intolerable side effects or contraindicated medical conditions is guanfacine extended release (GXR). GXR is a selective agonist of α 2A adrenergic receptors [2] and is currently approved in the USA (children and adolescents) and Canada (children) as a monotherapy and adjunctive (to stimulants) therapy for the treatment of ADHD. Preclinical studies suggest that the stimulation of α 2A adrenergic receptors may strengthen functional connectivity of prefrontal cortical microcircuits via the blockade of HCN channels [3], or promote maturation and increase the number of dendritic spines on prefrontal cortical neurons [4]. Furthermore, there is evidence showing that in deeper layers of the prefrontal cortex the stimulation of α 2A adrenergic receptors suppresses excitatory synaptic inputs in pyramidal neurons possibly protecting neurons from over-stimulation [5].

During continued treatment of children and adolescents with ADHD, the efficacy of stimulants, ATX and GXR are maintained. However, following treatment cessation, the re-emergence of symptoms and functional impairment differs between the classes of treatment suggesting that their respective mechanisms of action may result in differences in long-term efficacy. The contribution of the different mechanisms of action to such differences in long-term efficacy will be discussed.

1. Bymaster FP et al (2002) *Neuropsychopharmacology* 27:699–711
2. Arnsten AF et al (2007) *J Child Adolescent Psychopharmacol* 17:393–406
3. Wang et al (2007) *Cell* 129:397–410
4. Hu J et al (2008) *Brain Res* 1199:37–45
5. Yi F et al (2013) *Eur J Neurosci* 38:2364–73

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S6-03**A broader view on neurodevelopmental disorders***J. Buitelaar*

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Tags

Autism Spectrum Disorder (ASD) Attention Deficit Hyperactivity Disorder (ADHD), broader view, classification.

Symposium Overview

Symposium Type B

A broader view on neurodevelopmental disorders.

When comparing the current DSM-5 with its antecedents (i.e. DSM-III, DSM-III-R, DSM-IV and DSM-IV-TR), some progress can be observed. In earlier psychiatric classification schemes, many of the diagnoses included hierarchical exclusionary rules such that certain diagnoses could not be assigned if the symptoms occurred during the course of another disorder that occupied a higher level in the hierarchy (e.g. ADHD was excluded in the presence of ASD). These exclusion rules were later seen as problematic because these were not empirically based and made the study of lower-ranked diagnoses (e.g. ADHD) difficult. Therefore, the options to diagnose multiple disorders were extended, and diagnostic criteria were more specific and sensitive in later versions of the manual. Now, the best next step would be to no longer rely on a categorical approach (i.e. the disorder is either present or absent), but rather to adopt a dimensional model where deficits can be conceptualized as falling somewhere along a continuum that ranges from normal to pathological.

An important pioneer in this field is the National Institute of Mental Health (NIMH), which decided to no longer adhere to the current classification system, and to apply an experimental approach to the classification of mental disorders. The NIMH recently launched the Research Domain Criteria project (RDoC) to implement this strategy that incorporates not only behavioral symptoms, but also measures from neurocognitive, neurobiological and genetic research. The inclusion of multiple domains provides a broader view on developmental disorders in general, and a framework that ultimately brings the approach to disorders such as ASD and ADHD closer to the development of more sophisticated treatment. Although these neurocognitive, neurobiological and genetic domains have not made it into the DSM-5, it is acknowledged that it may not be too early to use neurobiology as a central tool to rethink the current approach to mental disorders (Hyman, 2007; 2010; Miller, 2010). That is, ongoing research could detach science from the unintended consequences of

reifying the current diagnoses that probably do not mirror nature. Different perspectives of this ongoing process that may help develop and adjust future classification criteria are discussed in this symposium.

References

Hyman SE (2010) *Annu Rev Clin Psychol* 6:155–179

Hyman SE (2007) *Nat Rev Neurosci* 8(9):725–732

Miller G (2010) *Science* 327(5972):1437

ESCAP 2015

Symposium type B

'A broader view on neurodevelopmental disorders' (submission no. 1976).

Jolanda van der Meer

S6-03-01**Exploring differential neural correlates of ASD and ADHD in the neuroimage cohort**

Jan Buitelaar, Eelco V. van Dongen, Colby Tanner, Corina U. Greven, Janita Bralten, Marcel P. Zwiers, Barbara Franke, Jaap Oosterlaan, Dirk Heslenfeld, Pieter Hoekstra, Catharina A. Hartman, Nanda Rommelse, Laurence O'Dwyer

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Autism spectrum disorder (ASD) symptoms frequently occur in subjects with attention deficit/hyperactivity disorder (ADHD). While there is evidence that both ADHD and ASD have differential structural correlates, no study to date has investigated these structural correlates within a framework that robustly accounts for the phenotypic overlap between the two disorders. The presence of ASD symptoms was measured by the parent-reported Children's Social and Behavioural Questionnaire (CSBQ) in ADHD subjects ($n = 180$), their unaffected siblings ($n = 118$) and healthy controls ($n = 146$). ADHD symptoms were assessed by a structured interview (K-SADS-PL) and the Conners' ADHD questionnaires. Whole brain T1-weighted MPRAGE images were acquired and the structural MRI correlates of ASD symptom scores were analysed by modelling ASD symptom scores against subcortical grey matter structural volumes using mixed effects models which controlled for ADHD symptom levels. ASD symptoms were significantly elevated in ADHD subjects relative to both controls and unaffected siblings.

The structural correlates of raised autism spectrum scores were assessed by modelling autistic scores against white matter (WM) and grey matter (GM) volumes using mixed effects models which controlled for ADHD symptom levels. A significant WM by GM interaction was found, with elevated autistic symptoms in ADHD subjects associated with raised GM volume. ASD scores were also predicted by a smaller volume of the left nucleus accumbens. The current findings point to a specific volumetric profile associated with raised autistic spectrum symptoms in ADHD subjects. They further suggest that the volume of the nucleus accumbens, which is an integral part of the social brain network, may influence the degree to which autistic traits are manifest in ADHD.

S6-03-02

Shared and specific behavioural and cognitive characteristics in children with ASD with and without ADHD

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The overlap between autism spectrum disorder (ASD) and attention deficit hyperactivity disorder (ADHD) is well-established in terms of co-occurring symptoms and diagnoses. However, the features that distinguish individuals with ASD with and without co-occurring ADHD is less well established. Shared cognitive features, particularly those of executive function deficits, have been reported in both ASD and ADHD, but most studies have not accounted for the degree of behavioural overlap. We use the Special Needs and Autism Project (SNAP) cohort to explore behavioural and cognitive factors that are shared and specific to the two groups.

Behavioural characteristics include autism profiles with respect to social reciprocity, communication deficits and restricted and repetitive behaviours and interests, as well as overall symptom severity. The pattern of additional mental health problems was also explored using diagnostic measures from the Child and Adolescent Psychiatric Assessment the Strengths and Difficulties Questionnaire and the Profile of Neuropsychiatric Symptoms.

Theory of mind (ToM) was evaluated using five different tasks to tap verbal and non-verbal, elements, as well as different levels of complexity. Executive function (EF) included measures of inhibition and cognitive flexibility.

Preliminary results suggest that, amongst those with ASD, EF deficits may be specifically linked to ADHD symptoms while ToM is linked to autism symptoms.

S6-03-03

Pre- and perinatal risk factors in attention-deficit/hyperactivity disorder and autism spectrum disorders

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Autism Spectrum Disorder (ASD) and Attention-Deficit/Hyperactivity Disorder (ADHD) frequently co-occur. Twin studies have shown a substantial genetic component of this overlap. Given the role of pre- and perinatal risk factors especially for ADHD aetiology, the aim of the present study was to elicit overlap and specificity of associated pre- and perinatal environmental risk factors on ASD and AD(H)D.

Methods: Age and sex matched children and adolescents, aged 4–18 years old, from five comparison groups were included into the present study. N = 42 ASD without AD(H)D; N = 30 ASD with ADD (inattentive ADHD subtype); N = 35 ASD with ADHD combined subtype; N = 37 ADD without ASD and N = 47 ADHD without ASD. Pre- and perinatal risk factors were obtained by a semi-structured medical history interview with the primary caregiver and from medical records. The following pregnancy related risk factors were analysed: maternal smoking, alcohol, drug use, different medications, diabetes, high blood pressure, accidents, bleedings. The

following perinatal risk factors were studied: oxytocin, Caesarean section, birth weight, perinatal infection, length of stay in incubator. **Results:** Preliminary analyses showed disorder specific risk factors for ADHD combined subtype (with and without ASD), especially smoking during pregnancy, and for the inattentive ADHD subtype, especially low birth weight. No disorder specific pre- or perinatal environmental risk factors were elicited for ASD.

Conclusions: The assessed pre- and perinatal environmental risk factors seem to play a major role only for AD(H)D, but not for ASD. The major limitation of the study is the retrospective assessment of many risk factors. The strength of the study is the inclusion of several differential groups with and without ASD and/or AD(H)D.

S6-04

Selective mutism: a challenge to assess and treat. long-term follow-up results of a psychosocial intervention and a review of pharmacological treatment

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Title

Selective Mutism: A challenge to assess and treat

Subtitle

Long-term follow-up results of a psychosocial intervention and a review of pharmacological treatment

Background: Selective mutism (SM) describes children who consistently do not speak in certain social situations, while they talk freely in other situations. SM is now understood as an anxiety disorder (DSM-5), but knowledge is still sparse on effective interventions, and long-term outcome. How the affected children view quality of life and their own speaking behavior is rarely described. More understanding on quantitative symptom measures, when to apply a categorical diagnosis of SM, and the effect of pharmacological treatment, is also needed.

Aims: To increase knowledge about SM by presenting long term outcome in the form of categorical and continuous measures of SM, as reported by parents, teachers, and children 4-6 years after completion of a home- and school based treatment we developed in 2007. Finally, to present an overview of pharmacological treatment.

Materials and methods: Three presentations report follow-up results from 30 children, (aged 3-9 years at study inclusion). I. Diagnosis of SM: The Anxiety Disorders Interview Schedule and the Kiddie-SADS-PL, II. The SM questionnaires: rated by parents (SMQ) and

teachers (SSQ), and III. The Children's own voices: The Inventory of Life Quality (ILC). Included here is also an overview of the treatment, which includes defocused communication, psychoeducation, and behavioural techniques (sliding-in-technique with rewards). Finally; IV. Pharmacotherapy in SM: A review study, including treatment guidelines.

Results: I. Four of the 30 children fulfilled diagnostic criteria for SM, five were in remission. 21 did not have SM II. A continuous increase was reported in speaking behavior on the SM questionnaires. III. Children rated their overall quality of life as good. Those who still fulfilled diagnostic criteria for SM, or were in remission, scored themselves significantly lower than children who longer had SM. IV. Studies of pharmacotherapy suggest symptomatic improvement of SM with selective serotonin reuptake inhibitors, but are limited by small numbers and few comparative trials.

Conclusions: The long-term follow-up results supported a home- and school based intervention for children with SM, and the SM questionnaires were sensitive measures of symptom improvement. Although the children reported their life quality as good, half of the children still found it somewhat difficult to talk outside home. The pharmacotherapy study indicates the need for further research, especially on optimal dosage and optimal timing in relation to psychosocial treatments.

Keywords; Selective Mutism, Diagnosis, Treatment, Long-term follow-up, Quality of life, Pharmacotherapy

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Title

Selective Mutism: Diagnosis of SM

Subtitle

Prevalence of SM and comorbid social phobia 4-6 years after treatment completion and diagnostic challenges

Background: Selective mutism (SM) is characterized by a consistent lack of speech in specific social situations in which there is an expectation for speaking (e.g. school) despite speaking in other situations (e.g. home). SM has been found to co-occur with other anxiety disorders in general, and social phobia in particular. Follow-up studies are sparse, but indicate that social phobia may persist despite an increase in speaking behaviour over time. Diagnosing SM represents a challenge. When scrutinizing the diagnostic criteria, neither the DSM-5, nor the ICD-10 is specific on the criterion "Consistent lack of speech". Whether some speaking in class (like to the teacher, or in smaller groups), is sufficient to diagnose SM, is not clear. We have previously called this intermediary position for "SM in remission".

Aims: To present the long-term diagnostic outcome 4-6 years after completion of the same home- and school based treatment for SM (a pilot- and an RCT study) and to increase knowledge about diagnostic challenges.

Materials and methods: Participants were 30 children, mean age 11 years (range 8-14) at follow-up, out of a total of 32 children consecutively referred for SM at ages 3-9 years. At inclusion, we specified that in addition to diagnostic criteria, the children should not speak to adults at school ("Consistent lack of speech"). SM was diagnosed using the SM-module from the Anxiety Disorders Interview Schedule (ADIS-IV), and compared with frequencies of SM diagnoses one year - and 4-6 years after end of treatment. Diagnostic comorbidity was assessed by the Schedule for Affective Disorders and Schizophrenia for School-Aged Children (K-SADS-PL) at all three time points for the RCT sample only, not the pilot study.

Results: At follow-up, twenty-one of the 30 children did not have SM. Four still fulfilled diagnostic criteria, while 5 were in remission, compared with the one year-findings, where 10 of 32 children still had SM, and 4 were in remission. All 24 children in the RCT sample fulfilled a comorbid diagnosis of social phobia at inclusion, compared with 19 one year after end of treatment, and only six children at the long-term follow-up.

Conclusions: The long-term diagnostic outcome seems favorable both in respect of diagnoses of SM and comorbid social phobia. This study illustrates the need for a specification of what constitutes a "Consistent lack of speech", as it is not uncommon that speech is present in some, but not all school situations.

Keywords; Selective Mutism, Treatment, Long-term follow-up, Diagnosis

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Title

The Selective Mutism Questionnaires

Subtitle

The SM questionnaires rated by parents and teachers 4-6 years after treatment completion

Background: Selective mutism (SM) describes children who consistently do not speak in certain social situations, while they talk freely in other situations. As symptoms differ widely in different situations, Lindsey Bergman (UCLA) developed the Selective Mutism Questionnaire (SMQ). Parents rate speech frequency in three contexts; at school, at home with family and in public settings, and a total sumscore can be computed. A teacher rated School Speech Questionnaire (SSQ) was developed to get an accurate measure of speaking behaviour at school, where symptoms tend to be most severe. The questionnaires are scored on a scale from 0–3, where 0 indicates that speaking behaviour never occurs, and 1, 2 and 3 refer to seldom, often and always speaking, respectively. They are quantitative measures with no cut-off scores, but a psychometric SMQ-study suggested a score ≤ 0.5 on the School subscale for children with SM compared with ≥ 2.5 for children without SM.

Aims: To present long-term follow-up results on the SM questionnaires reported by parents and teachers 4-6 years after completion of a home- and school based treatment for SM.

Materials and methods: Participants were children with mean age 11 years at follow up (range 8–14 years, 9 boys) from the original samples, which included a total of 32 children, aged 3–9 years at study inclusion. Questionnaire ratings at follow-up were available from 28 parents and 29 teachers and analyzed in a mixed model together with ratings from four previous time points: Baseline values at study inclusion, after 3- and 6 months of treatment, and one year after end of treatment.

Results: A significant and continuous increase was found on the teacher rated SSQ ($F=24.44$, $p<.001$) with a mean total SSQ score at baseline was 0.54 ($sd=0.44$) compared with 1.86 ($sd=0.77$) at follow-up. These findings were corroborated in parent ratings who reported a mean total SMQ score of 2.27 ($sd=0.55$) at follow up. Children who at follow-up still fulfilled diagnostic criteria for SM ($n=4$), or were in remission ($n=5$), were rated significantly lower by teachers (unaware of diagnostic status at follow-up) (SSQ mean=1.19, ($sd=0.57$)) compared with the 21 children who no longer had SM (mean=2.16, $sd=0.66$) $p=.001$.

Conclusions: The SM questionnaires were sensitive measures of symptom severity and improvement. Although we found an important and clinically significant increase in speaking behavior, the SM questionnaires suggest that the children continue to score somewhat below typically developing children.

Keywords; Selective Mutism, Treatment, Long-term follow-up, Selective Mutism Questionnaire, School Speech Questionnaire

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Title

Selective Mutism: The children's own voices!

Subtitle

How do children report their quality of life and speaking behaviour 4–6 years after participation in a SM treatment study?

Background: Selective mutism (SM) is considered difficult to treat. Recommended psychosocial treatment includes (cognitive)-behavioural and multimodal interventions. In 2007, we developed a home- and school-based intervention for 3–9 years old children with SM. Treatment effect was examined in a pilot- and a randomized controlled treatment (RCT) study, including a one year follow-up. The intervention consists of:1. Defocused communication as a general treatment principle, 2. Psychoeducation of parents and teachers together to ensure a common understanding, and 3. Behavioural techniques (sliding-in technique with rewards) with the children.

Aims: To examine how the children perceived their quality of life and speaking behaviour 4–6 years after treatment for SM.

Methods: A total of 28 children (of the 32 invited), completed The Inventory of Life Quality in Children and Adolescents (ILC) at mean age 11 years (range 8–14 years) 10 boys. ILC assesses quality of life over the past week and consists of seven items: One global item, and six items addressing subjective well-being at school, in the family, with peers, when alone, and perception of physical and mental health.

Each item is rated on a 1–5 scale (1=very good to 5=very bad). In addition, the children rated their difficulties with speaking at school/ outside home on a corresponding Likert scale.

Results: The children perceived to have an overall good quality of life. Only one child scored below the normative level. Those who still fulfilled diagnostic criteria for SM, or had SM in remission ($n=8$), according to a diagnostic interview with the mother at follow up, reported a significantly lower quality of life compared with those without SM ($n=20$): ILC total score: 21.3 ($SD=3.4$) versus 23.9 ($SD=2.6$); $p=0.03$. In contrast, the two groups did not differ in their rating of speaking behaviour. Half of the children found it “very easy” ($n=8$) or “rather easy” ($n=6$) to speak at school and elsewhere outside their home whereas the other half scored the item as “in between” ($n=12$) or rather difficult ($n=2$).

Conclusion: The children rated their overall quality of life as good. Those who still fulfilled diagnostic criteria for SM or were in remission, scored significantly lower than those who no longer had SM. Independent of a SM diagnosis or not, half of the children still found it somewhat difficult to talk at school and elsewhere outside home.

Keywords: Selective Mutism, Treatment, Long-term follow up, Quality of life

Presentation Number 4. Author:

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Title

Pharmacotherapy in Selective Mutism

Subtitle

A review study of pharmacological treatment for Selective Mutism

Background: Medications are generally used in SM when children fail to respond to psychosocial interventions. Both selective serotonin reuptake inhibitors (SSRIs) and monoamine oxidase inhibitors (MAOIs) have been reported to reduce symptoms.

Aims: This paper reviews existing evidence for the efficacy of these medications, limitations of the literature, and treatment considerations emerging from these findings and from the authors' experience.

Methods: A systematic review of three relevant databases (Medline, PsychInfo, Embase) was conducted using the search terms ‘selective mutism’ or ‘elective mutism’ and ‘medication’. Resulting abstracts were then limited to studies reporting original data for children with SM. Nine papers reporting on >2 subjects were then examined in detail.

Results: Most papers were single or twin case reports. Among larger studies, symptomatic improvement was found for 57/70 children treated with SSRIs and 4/4 children treated with phenelzine, but only 3/9 studies had unmedicated comparison groups and only two of these were double-blinded.

Conclusions: Although there is some evidence for symptomatic improvement in SM with medication, especially SSRIs, it is limited by small numbers, few comparative trials, and lack of consistent reports on tolerability. The clinician must weigh this paucity of evidence against the highly debilitating nature of SM, and its adverse effects on the development of those children whose progress with psychosocial interventions is limited or very slow. Studies of optimal dosage and timing of medications in relation to psychosocial treatments are also needed.

Keywords; Selective Mutism, Treatment, Pharmacotherapy, SSRI's, Review

S6-05**Efficacy of cognitive training and EEG-neurofeedback in children with neuropsychiatric disorders**

D. Slaats-willemse

Radboud University Nijmegen Medical Centre, Donders Institute for Brain, Cognition and Behaviour, Nijmegen, The Netherlands

Symposium chair: D. Slaats-Willemse^{1,2}

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Speakers and title of each lecture:

-Rosa van Mourik: Train your brain: The Effectiveness of Neurofeedback compared to Medication and Physical Exercise in ADHD

-Sammy Roording-Ragetlie: Working memory training in children with neuropsychiatric disorders with or without borderline intellectual disabilities

-Marthe van der Donk: Is cognitive training effective for children with ADHD? A randomised controlled trial of Cogmed Working Memory Training and Paying Attention in Class

-Albert Ponsioen: Evaluating a computerized training of executive functions with Single-Case Experimental Design methods

Symposium overview

Neuropsychiatric disorders are associated with impairments in social, cognitive and emotional development, and poor academic outcomes. Because of the severity and long-term nature of these disorders, efforts have been made to identify effective treatments. Although psychostimulants are the first-choice treatment in disorders such as Attention-Deficit/Hyperactivity Disorder (ADHD) medication is not effective in 20–30 % of the children with ADHD. Further, patients may have concerns about side-effects. So, there is a need for effective non-pharmacological treatments for ADHD and related disorders. Cognitive training and EEG-neurofeedback are viewed as promising alternative treatments. It is suggested that targeting the underlying electrophysiological brain activity and cognitive functioning thought to mediate the causal pathways of the neuropsychiatric disorder would potentially lead to improvements in behavior, academic achievements and daily life. In this symposium, the efficacy of EEG-neurofeedback, Cogmed Working Memory training and two new cognitive training methods, i.e. Braingame Brian and Paying Attention in Class, will be discussed. Results on single-case experimental designs-studies and randomized controlled trials in children with ADHD and other neuropsychiatric disorders are showed.

Four different research projects will be presented. The first project will focus on the effectiveness of neurofeedback compared to medication and physical exercise in ADHD. Next, data will be presented on the effects of Cogmed working memory training in children with neuropsychiatric disorders with or without borderline intellectual disabilities. The third speaker will compare the effects of Cogmed to those of a new cognitive classroom-training called Paying Attention in Class. Finally, the efficacy of a computerized training, i.e. Braingame Brian aimed at three domains of executive functioning (EF), working memory, inhibition and mental flexibility, is evaluated. All results will be discussed in light of the methodological limitations that accompany research on non-pharmaceutical treatment effects. What is the role of non-specific therapeutic effects? Can we capture these effects in randomized placebo controlled trials? How can we achieve durable improvements on behavioral and neurocognitive level? And what about the transfer effects to daily life and academic achievements? These, and more issues that may have implications for future research and clinical application will be discussed.

S6-05-01**Train your brain: the effectiveness of neurofeedback compared to medication and physical exercise in ADHD**

Rosa van Mourik¹, PhD, Katleen Geladé, MSc², Tieme Janssen, MSc¹, Marleen Bink, PhD, Athanasios Maras, MD, PhD², Prof. Dr. Jaap Oosterlaan¹

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Background: ADHD is a common neuropsychiatric disorder with severe consequences for the child and its environment. Psychostimulants are the first-choice treatment, although not effective in 20–30 % of the children and there are concerns about side-effects. There is a high need for effective non-pharmacological treatments. Neurofeedback (NF) is a non-invasive operant conditioning procedure aimed at developing skills for self-regulation of brain activity. If the brain activity changes in the desired state, positive feedback is given to the patient. NF has been classified as ‘probably effective’ but its treatment effects need further empirical evidence. This study compares NF with psychostimulant treatment (MPH), and with physical exercise (PE), a second promising, non-pharmacological intervention in ADHD that is comparable in non-specific effects. **Methods:** In this study, 112 children with a DSM-IV diagnoses of ADHD, aged between 7 and 13 years, are randomly allocated to treatment with MPH, NF or PE. Methylphenidate dosing is carefully determined using a double-blind randomized controlled trial with three active doses and placebo. Each doses is taken twice daily during 1 week, and parents and teachers rate the child’s behavior. The optimal dose is determined based on the reliable clinical change on the rating scales. NF training is aimed at decreasing theta/beta ratio and is provided three times a week during 10 consecutive weeks. The PE intervention is comparable in intensity with the NF training and consists of various aerobic exercises. The direct effects of the treatments are assessed after 10 weeks. Outcome measures include rating scales (SWAN and SDQ), neurocognitive measures and EEG. **Results:** According to parents, behavior improved regardless of type of treatment. However, larger improvements on attention were reported after MPH treatment. Teachers only reported large improvements on all measures after MPH. No differences were found between PE and NF treatment. EEG power spectra measures during eyes open (EO), eyes closed (EC) and task (effortful) conditions were available for 81 children at pre- and post-intervention (n = 29 NF, n = 27 MPH, n = 25 PA). Both NF and MPH resulted in comparable reductions in theta power from pre- to post-intervention during the EO condition compared to PE. For NF, larger reductions in theta were related to larger reductions in ADHD symptoms. During the task condition, only MPH showed reductions in theta and alpha power compared to PA. **Discussion:** At the short term, psychostimulant treatment is superior to neurofeedback and physical exercise. Although parents reported improved behavior after neurofeedback treatment and specific effects in theta activity were found, these effects did not generalize to a task condition nor to classroom behavior. In its present form, the physical exercise intervention failed to improve behavior and no changes were found on EEG. The value of neurofeedback and physical exercise treatments as an alternative to medication will be further discussed. Furthermore, the differences between parent and teacher ratings will be discussed as well as the clinical relevance of the outcome measures, individual differences and clinical implications.

Keywords: ADHD, EEG-neurofeedback, Physical Exercise, neurocognitive, Behavior, Psychostimulants.

S6-05-02**Working memory training in children with neuropsychiatric disorders with or without borderline intellectual disabilities**

S. Roording-Ragetlie², H. Klip², Madelon A. Vollebregt^{2,3}, MSc, Martine van Dongen-Boomsma^{1,2,3}, Buitelaar^{2,3}, D. Slaats-Willemse^{1,2}

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Background: The efficacy of neurocognitive training, like Cogmed Working Memory Training (WMT) is a hot topic in recent literature. Some suggest these kind of interventions have potential value in the treatment of children with neuropsychiatric disorders, like ADHD. Others are more sceptic and recent reviews are reserved about the efficacy of these kind of interventions in a diversity of patient groups. Inconsistent findings within and between studies and methodological shortcomings yielded doubt about training efficacy. More insight is needed in specific patient groups, with solid research designs. At this symposium data from two Double Blind Randomized Placebo-Controlled Trials on the efficacy of Cogmed WMT in children with neuropsychiatric disorders will be presented. **Methods:** In the first study fifty-one children (5–7 years) with a DSM-IV-TR diagnosis of ADHD were randomly assigned to the active (adaptive) or placebo (nonadaptive) training condition for 25 sessions during 5 weeks. In the second study, seventy-four children (10–14 years) with a DSM-IV-TR diagnosis of ADHD and/or ASS in combination with a borderline intellectual functioning (BIF) were allocated to Cogmed WMT or a placebo-Cogmed treatment, for 25 sessions, 5 times a week, 5 weeks in total. Behavioral effects and neurocognitive functioning were measured before and after training in both studies. **Results:** No significant treatment effect on any of the primary or other secondary outcome measurements was found in the first study on young ADHD children. Results of the second study on children with BIF and neuropsychiatric disorders will be presented at the symposium. **Conclusions:** The first study failed to find robust evidence for benefits of Cogmed over the placebo training on behavioural symptoms, neurocognitive, daily executive, and global clinical functioning in young children with ADHD. Conclusions from the second study will be discussed at the symposium.

Keywords: Working memory training, ADHD, ASS, Borderline intellectual disabilities.

S6-05-03**Is cognitive training effective for children with ADHD? A randomised controlled trial of Cogmed Working Memory Training and paying attention in class**

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Introduction and objectives: The last decade, working memory training has received increasingly more attention as a potential effective non-pharmacological intervention for children with Attention-Deficit/Hyperactivity Disorder (ADHD). It is suggested that targeting the underlying cognitive deficits thought to mediate ADHD causal pathways, such as working memory, would potentially lead to greater transfer and generalization to functioning in everyday life such as academic performance. One of these potentially effective and worldwide implemented interventions is Cogmed Working Memory Training (CWMT). The goal of this randomized controlled trial was to determine the effect of CWMT in children with ADHD by replicating and extending previous findings in terms of long term- and far transfer measures in a rigorous design with an active control group.

Methods: Hundred and two Dutch children with Attention-Deficit/Hyperactivity Disorder, between the age of 8 and 12 years, were randomly assigned to either the CWMT or to an active control group that received a new cognitive training called Paying Attention in Class. Primary outcome measures were neurocognitive functioning and academic performance. Secondary outcome measures contained ratings of behavior in class, behavior problems and quality of life. Assessment took place before, directly after and 6 months after treatment.

Results: The results showed that over time, both interventions led to broad improvements in neurocognitive functioning (visual spatial WM, verbal WM, attention, inhibition and planning) and both parent and teacher ratings of executive functioning and ADHD related behavior. We found no significant improvements on academic performance, behavior in class and quality of life. We were only able to replicate a treatment effect in favor of CWMT for the trained visual spatial WM task (Spatial Span).

Discussion: As our design did not contain a ‘no treatment’ control group (e.g. waiting list) as a third arm for allocation, so we cannot rule out other possible cofounders such as time (development of age), expectancy effects or therapeutic benefit. We suggest that future trials with well-blinded measures and a third ‘no treatment’ control group are needed before cognitive training can be supported as an evidence-based treatment of ADHD. Furthermore, we suggest that future studies should put more effort into investigating how and why training is effective (working mechanism) in terms of underlying neural and cognitive mechanisms and for whom training is most effective. This might shed some light on the question why some of the transfer measures are improved and others are not and may subsequently lead to improved intervention designs.

Keywords: ADHD, Working memory, Executive function training.

S6-05-04**Evaluating a computerized training of executive functions with single-case experimental design methods**

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Background: In current views on mental disorders there is a growing change in focus from behavioural manifestations of psychopathology (e.g. ADHD) to the underlying cognitive and emotional processes. Children with the same classification may have different underlying

cognitive and/or emotional profiles while children with different classifications may have very similar profiles. Interventions which take behaviour as a point of reference instead of the individual underlying profiles may fail to be effective for certain subgroups of children. Randomized controlled trials (RCTs) are still considered the golden standard in establishing the efficacy of interventions. If individual differences are ignored in RCTs, non-significant results may overshadow the value of an intervention method for children with specific profiles. Single-Case Experimental Designs (SCEDs) are sensitive to individual variations and are increasingly considered an important alternative to RCTs.

Methods: The efficacy of a computerized training ('Braingame Brian') aimed at three domains of executive functioning (EF), working memory, inhibition and mental flexibility, is evaluated by means of a SCED-study. The SCED included multiple assessments with daily report scales in a pre-treatment phase, followed by a treatment phase, a post-treatment phase and a follow-up phase.

Results: SCED-studies give insight in the mechanisms by which an intervention is effective in one child but less effective in another child with the same behavioural characteristics. To illustrate SCED we present the data from ten case studies of children with EF-problems who were trained with Braingame Brian.

Conclusions: With the results of SCEDs interventions can be tailored to intra-individual characteristics and can lead to more balanced conclusions about the efficacy of interventions such as the cognitive training Braingame Brian.

Keywords: Executive function training, ADHD, single case experimental design (SCED), Braingame Brian.

S6-06-01

Evidence-based program for improving socio-emotional skills and executive function in children and adolescents with autism and developmental delay

Eliez S, Glaser B

University Of Geneva

Evidence-based program for improving socio-emotional skills and executive function in children and adolescents with autism and developmental delay.

Background: Vis-À-Vis is a non-commercial web-based software program designed for children and adolescents (ages 7-16) with mild retardation and targeting working memory, emotion recognition, and face processing: core cognitive weaknesses in both autism and 22q11.2 deletion syndrome, as well as in other groups with idiopathic developmental delay. While much is known about the impact of impaired face processing on emotion recognition and social skills, there is a lack of tools that can be used to teach faces and emotions to school-age children. We designed Vis-À-Vis as an individualized program that can be done at home, at school, or in therapy and then evaluated whether it contributes to changes in cognition and behavior.

Methods: Nineteen (high and low functioning) previously diagnosed participants with ASD and 16 participants with 22q11.2 deletion syndrome were compared with 14 individuals with developmental delay (all aged 7-16). All participants completed the twelve-week -Vis-A-Vis program and underwent cognitive-behavioral evaluations before remediation (preR), after remediation (postR), and 12 weeks later (post-rest).

Results: The autistic and 22q11DS groups showed marked improvement in attention and concentration (measured by the Children's Memory Scale) at preR < post-rest: ($F(2, 86)=4.221, p=.032$); non-verbal reasoning (measured by the Raven Matrices) after remediation

at postR and post-rest (preR < postR & post-rest: ($F(2, 88)=3.467, p=.037$) recognition of facial emotional expressions at postR and post-rest (preR < postR & post-rest: ($F(2, 88)=107.768, p<.001$).

Conclusions: VisAVis is an educational software program that was created based on research and then tested with multiple diagnostic groups. Vis-À-Vis is available at www.visavis.unige.ch in French, Italian, English, German and Danish. It is designed as an educational material to be done one-on-one with a parent or other adult. Our findings support the utility of VisAVis as a tool for working on socio-emotional impairments in ASD and 22q11DS during middle childhood.

S6-06-02

Autism specific group therapy: randomized controlled trial

C. Freitag

Goethe University Hospital, Frankfurt Am Main, Germany

Objective: Group based psychotherapy for Autism Spectrum Disorder (ASD) has predominantly been studied by small randomized controlled studies without follow-up. Here, we report results of a confirmatory, multi-center randomized controlled phase-III trial in children and adolescents, including 3 months follow-up, studying the ASD specific group based SOSTA-FRA approach.

Method: High-functioning individuals with ICD-10 diagnoses of Childhood autism, Asperger Syndrome or Atypical autism aged 8 to 19 years old were randomized to twelve sessions SOSTA-FRA or to waiting list/treatment as usual. Computer based 1:1 randomization stratified by center was done in groups of eight or ten patients. Primary outcomes were change in total raw score of the parent rated Social Responsiveness Scale (pSRS) (a) between baseline (T2) and end of intervention (T4), and (b) between T2 and 3 months after end of intervention (T5), adjusted for age, IQ, baseline pSRS, and center. Primary analysis was done based on the intention-to-treat (ITT) principle.

Results: Between 20/5/2010 and 14/2/2013, $n = 320$ ASD patients were screened for eligibility, $n = 228$ patients were randomized, and $N = 209$ analyzed (ITT). Mean difference between groups at T4 was -6.5 (95 % CI -11.6 to -1.4 ; $p = 0.013$), and at T5 -6.4 (-11.5 to -1.3 , $p = 0.015$). No serious adverse events were reported, and adverse events were comparable in both groups.

Conclusions: Short term ASD specific add-on group based psychotherapy can be recommended as efficacious and safe treatment for high-functioning children and adolescents with ASD leading to lasting improvement of social responsiveness.

Trial registration: ISRCTN94863788.

S6-06-03

ASD and developmental psychiatry: experience of Children's Hospital at Westmead, Sydney

D. Dossetor

Sydney Children's Hospital Network, Randwick, Australia

ASD and developmental psychiatry: experience of Children's Hospital at Westmead

David Dossetor, Director of Mental Health Sydney Children's Hospital Network, Child Psychiatrist, Clin A/Prof, University of Sydney.

Background: Children with developmental disabilities including autism spectrum disorders (ASD) often have complex clinical needs. Traditionally there have not been specific services to meet the complex needs of this population, who are expected to access generalist child and adolescent services.

In this context, a unique developmental psychiatry clinical team was developed at Children's Hospital Westmead (CHW) and was later expanded to include the CHW School-Link. This team represents a collaboration between CHW, Children's Team of Statewide Behaviour Intervention Service of NSW Disability Services (SBIS) and NSW Department of Education.

Objectives: This session will use the description of an existing specialist service built on a collaboration between the health, disability and education sectors and the projects it has achieved to reflect on the complexity of this clinical area and the service model that works best to meet the complex needs of children and adolescents with developmental disabilities.

Methods: Four major projects will be described: an evidence-based developmental framework and multidisciplinary training curriculum to promote the mental health of children and adolescents with intellectual and developmental disabilities, a school based intervention for ASD (Emotion Based Social Skills Training), Stepping Stones (a group intervention targeting mental health promotion), and a clinical review of 150 clinical cases seen by the service.

Findings: The positive outcomes from each of these four projects described show the potential for therapeutic gain in this challenging population. Much innovation and clinical benefit can be achieved by multidisciplinary multiagency collaborative partnerships, where skills and resources are shared.

Conclusions: Such a collaborative clinical subspecialty service provision provides a best practice model, would seem to be clinically highly cost effective, but may not survive the 'free market economy' of the NDIS.

Refs: Dosssetor D, White D, Watson L (Eds) (2011) Mental health for children and adolescents with intellectual and developmental disabilities: a framework for professional practice. <http://www.ipcommunications.com.au>

Mental health for children and adolescents with intellectual and developmental disabilities: an educational resource: a free electronic journal. Register @ <http://www.schoolink.chw.edu.au>.

S6-06-04 An investigation of cortical structure in autism spectrum disorder

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Background: Acquisition of high-resolution data has enabled the investigation of the two determinants of grey matter volume, cortical thickness (CT) and surface area (SA). These measures have been found to be genetically uncorrelated, phenotypically independent and highly heritable. A gyrification index (GI) or degree of folding and a measure of sulcus depth (SD) can also be derived to evaluate cortical structure. It has been suggested that abnormalities within these four metrics may contribute to the clinical heterogeneity of ASD.

Methods: High-resolution T1-weighted images were acquired from 63 participants with ASD and 63 age and IQ matched controls. Vertex-by-vertex group differences were evaluated using QDEC, a Freesurfer software package. Cortical maps were smoothed with a 10 mm full-width-half-maximum Gaussian kernel. Monte Carlo simulation with 10,000 iterations was performed with a clusterwise threshold of $p < 0.05$ for multiple comparison correction. Total intracranial

volume, mean CT and SA were demeaned and included as nuisance variables. Age and IQ were also demeaned and included as variables. For all significant clusters, exploratory Spearman correlations with clinical measures of SCD and RRB were performed.

Results: The groups did not differ in age ($t(124) = -0.709, p = 0.48$) or IQ ($t(124) = -1.783, p = 0.077$). Cortical thinning was observed in the left supramarginal, superior frontal and precentral gyri in ASD relative to controls. Greater surface area was identified in ASD in several frontal, parietal and temporal regions in comparison to controls. Cortical folding patterns (GI and SD) differed between groups in the right inferior temporal, anterior cingulate and insula regions. A significant group-by-age interaction in gyrification was observed in the superior frontal gyrus (MNI: $-10\ 64.3\ 6.5; p = 0.001$). Greater social and communication deficits were significantly correlated with reduced cortical thickness in the left superior frontal gyrus ($r = -0.347, p = 0.005$) in the ASD group.

Conclusions: Regions identified in the current study have been previously implicated in ASD pathology. Increased cortical thinning in ASD may indicate excessive synaptic removal and dendritic pruning in the disorder. Surface area integrity is considered driven by the number of minicolumns thus the current findings are in line with post-mortem studies which observed a greater volume of minicolumns in ASD. Disrupted cortical folding is thought to reflect aberrant structural connectivity due to tension applied by radial glial cells during neuronal development. Therefore, increased gyrification and reduced sulcal depth may represent disrupted structural connectivity in ASD. This study suggests that disrupted cortical formation occurs in ASD.

MONDAY

M1-01 Development trajectories in children and adolescent with life-course and optimal outcome Autism Spectrum Disorder (ASD)

K. Munir, N. Motavalli Mukaddes, A. Baghdadli

Harvard Medical School, Boston Children's Hospital, Boston, USA; Istanbul Institute of Child Psychiatry, Istanbul, Turkey; Autism Resources Center-Chru, West Boylston, USA

Symposium Overview

Symposium Chair and Corresponding Author: Kerim Munir, MD, MPH, DSc, Boston Children's Hospital, Harvard Medical School, USA; E-mail: kerim.munir@childrens.harvard.edu;

Names and institutional affiliations of the speakers:

1. Symposium Chair and Corresponding Presenting Author: Kerim Munir, MD, MPH, DSc, Boston Children's Hospital, Harvard Medical School, USA; E-mail: kerim.munir@childrens.harvard.edu; Title of Presentation: What do clinical and epidemiological studies tell us about the current developmental trajectories and outcomes in ASD?
2. Presenting Author: Amaria Baghdadli, MD, PhD, Autism Resources Center, Child and Adolescent Department, CHRU Montpellier, France; Email: a-baghdadli@chu-montpellier.fr; Title of Presentation: What do we learn from cohort studies about outcome in ASD?
3. Presenting Author: Nahit Motavalli Mukaddes, MD, Istanbul Institute of Child Psychiatry, Nisantasi, Istanbul Turkey; Email: n-motavalli@yahoo.com. Title of Presentation: What happens to children and adolescents who move off autism spectrum? A clinical follow-up study after loss of established diagnosis of ASD.

Symposium Overview Abstract:

Autism spectrum disorder (ASD) is traditionally considered a life-course disorder. However, recent studies suggest that some high functioning subgroup of children and adolescents with established ASD can achieve optimal outcomes (OO) and may no longer endorse diagnosis. The presentation by Dr. Motavalli Mukaddes will emphasize an emerging dichotomy between persistent vs. non-persistent optimal course ASD. She will present results of her clinical follow-up study of relatively high functioning children and adolescents with previously established ASD assessed at least 2-years following loss of ASD diagnosis. Twenty six subjects (21 male, 5 female) were examined, ages 6–16 years (mean 9.2 ± 2.9), recruited from the larger OO cohort ($n = 39$), 26 meeting the 2-year diagnosis lapse criterion. Psychiatric and psychometric assessments of this sample including Schedule for Affective Disorders and Schizophrenia for School-Age Children Present and Lifetime Version (K-SADS-PL), the Wechsler Intelligence Scale for Children—revised version (WISC-R), and Social Communication Questionnaire (SCQ)—current version, endorsed at least one psychiatric disorder (92.3 %), thus necessitating psychiatric attention long after achieving OO and continuation of essential treatment plan and access to services. Dr. Baghdadli will present the results of the EPITED cohort, referenced in the National Autism Plan, a French multi-center cohort with follow-up of 260 children with a diagnosis of ICD-10 Autism initially included in the cohort ongoing since 1997. The developmental trajectories over time of the participants of this cohort and their predictive variables will be presented. She will then discuss the role played in these trajectories by comorbid associated conditions, e.g., self-injury, aberrant behaviors and intellectual disability, and their impact on parent's quality of life. International consortia will allow early prospective collection of data to promote understanding of long-term developmental trajectories. Dr. Munir will summarize the key clinical and epidemiological data supporting the following conclusions, among others: (1) that ASD core symptoms do not on average deteriorate over time with transition to adolescence and adulthood years despite low functioning in adult years, suggesting the need for better habilitation and vocational services; (2) overall those individuals with higher intellectual functioning and speech fare better; (3) greater heterogeneity in higher functioning ASD leads to high psychiatric comorbidity over time, irrespective of persistence of ASD; (4) early diagnosis, interventions and supports drives improved outcomes at younger ages; and (5) the linkage in the DSM-5 ASD classification of support needs and severity levels may compromise service availability for the greater potential outcome groups.

M1-02 US guidelines and updates on select psychiatric disorders

Abstract type: Symposia type B

Thematic area: Services, Treatments and Advocacy: Other

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U.S. Guidelines and Updates on Select Psychiatric Disorders

Given the increase in prevalence in certain psychiatric diagnoses, it is important to highlight a set of guidelines for treatment and the benefits and obstacles of implanting these into clinical practice. Certain psychiatric illnesses such as Attention Deficit-Hyperactive Disorder (ADHD), Gender Dysphoria, and Substance Abuse experience great media publicity, which further stigmatizes children and adolescents with these disorders. With the increase in diagnoses, there are more numerous studies, more social media discussion, and more hurdles to implementing the best practice treatments with adolescents with these psychiatric symptoms. This panel of prominent New York based child and adolescent psychiatrists will discuss these issues and recommendations.

ADHD is a debilitating neurobehavioral disorder affecting children and adolescents. Symptoms impact children and their families beyond the classroom yet many discussions focus primarily on treatment with medication alone or as a last resort after other interventions are exhausted. Dr. Oatis will discuss his extensive work on ADHD and best practices of implementing appropriate interventions with adolescents as well as the family role.

Adolescent substance abuse presents clinicians with ongoing challenges regarding timely diagnosis and effective treatments. Dr. Ivanov will review and discuss risk factors for adolescent substance abuse, early warning signs and the clinical aspects of recreational drug use, misuse of prescription medications and clinical guidelines for screening and treatment of adolescents with problem drug use.

The management of gender dysphoria has evolved to include diagnosis and treatment of children and adolescents with discussions regarding social transitioning, pubertal suspension, and hormonal interventions. There are issues with integration of children into schools as well as extracurricular activities and even in medical clinics. This presentation by Dr. Pleak will review U.S. and international guidelines for treating youth with gender dysphoria published between 2012–2015.

The discussion following the presentations, chaired by Dr. Palyo, will aim to highlight the selected psychiatric diagnosis, the guidelines and updates on implementing these recommendations into a clinical setting.

Each presenter will speak for 20 min with a 30-min discussion.

Symposia

Clinical Disorders: Neurodevelopmental Disorders, Gender Dysphoria, Substance Misuse and Related Disorders

Keywords: (minimum 2) ADHD, Gender Dysphoria, Substance Use, US Guidelines.

M1-02-01 Adolescent substance abuse disorders assessments and practice treatments

Iliyan Ivanov, M.D

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Adolescent substance use disorders (SUD) are strongly associated with the leading causes of adolescent morbidity and mortality (e.g., accidents, suicide) and as such represent a major public health problem. The identification of warning signs and early symptoms of problems drug use leading to adolescent SUD is of great importance for the development of prophylactic treatments and reducing the public burden of adolescent SUD. It is known that youth with disruptive behavior disorders, including attention deficit/hyperactivity disorder (ADHD), oppositional defiant disorder (ODD) and conduct

disorder (CD) have been shown to be at elevated clinical risk for adolescent SUD. This relationship is further influenced by other factors, including familial SUD, environmental context, and exposure to drugs of abuse and parenting. It is also hypothesized that physiological changes of adolescence may promote risk-taking behaviors, including binge drinking, and some data suggests that approximately 40 % of alcoholics were already drinking heavily in late adolescence with peak prevalence of alcoholism at 18–23 years of age. Therefore adolescence is the key time frame for the development and prevention of alcoholism and substance use disorders.

Available evidence for the efficacy of prevention programs targeting youths from substance abusing families show that school, community and family based interventions appear most effective for outcomes proximal to the intervention, such as program-related knowledge, coping-skills, and family relations (Broning et al., 2012). Further, as there are no officially approved pharmacological agents for the treatment of alcohol/drug use disorders in adolescence, several agents (e.g. bupropion, buprenorphine (Minozzi et al., 2014) have been shown to offer some benefits in treating adolescent SUD. Lastly, while concerns have been raised about possible misuse and abuse of stimulants by vulnerable adolescents (and possibly other family members) most studies support that idea that stimulants do not increase risk for adolescent substance use disorders (Humphreys et al., 2013) and that they can be safely used in adolescent with comorbid ADHD and SUDs.

The presentations will provide information on evidence-based assessments for adolescents SUDs and will provide a practical approach to SUD-focused treatments that can be implemented in clinical practice at various settings.

References

1. Bröning S, Kumpfer K, Kruse K, Sack PM, Schaunig-Busch I, Ruths S, Moesgen D, Pflug E, Klein M, Thomasius R (2012) Selective prevention programs for children from substance-affected families: a comprehensive systematic review. *Subst Abuse Treat Prev Policy* 7:23
2. Humphreys KL, Eng T, Lee SS (2013) Stimulant medication and substance use outcomes: a meta-analysis. *JAMA Psychiatry* 70(7):740–9
3. Minozzi S, Amato L, Bellisario C, Davoli M (2014) Detoxification treatments for opiate dependent adolescents. *Cochrane Database Syst Rev* 4

M1-02-02 Guidelines for treating gender variant and gender dysphoric children and adolescents

Richard R. Pleak, MD

Hofstra North Shore-LIJ School of Medicine, Glen Oaks, NY USA

Background: Most clinicians lack experience with gender variant and gender dysphoric youth, who have unique issues: they are little understood and are frequently victims of harassment and rejection. They often suffer from isolation, depression, and suicidality at high rates. Working with these youth poses additional considerations, as most gender variant/dysphoric children do not grow up to be gender variant/dysphoric adolescents or adults. Gender variant/dysphoric youth may experience desires and behaviors that can be challenging. Their families and their society may accept, support, ignore, reject, and even harm their children.

Methods: This presentation will detail the development and progression of gender variance from childhood through adolescence. Cases of children will be described, with different outcomes on follow-up. Recent

(2011–2015) guidelines from U.S. and international organizations will be reviewed, including: the American Academy of Child and Adolescent Psychiatry's Practice Parameter on Gay, Lesbian, or Bisexual Sexual Orientation, Gender Nonconformity, and Gender Discordance in Children and Adolescents (2012); the American Psychiatric Association's Work Group on Gender Dysphoria report (2012); the American Academy of Pediatrics policy statement (2013); the World Professional Association for Transgender Health's Standards of Care Version 7 (2012); the Royal College of Psychiatrists' guidelines (2013); and others. **Results and conclusions:** These recent guidelines have updated practical clinical utility for professionals to help these youth, including educating and supervising less experienced providers, and are useful for all clinicians in assessing, treating, and advocating for gender variant/dysphoric youth.

M1-02-03 Treating attention deficit hyperactivity disorder (ADHD)

Melvin Oatis, MD

NYU Langone Medical Center, New York, USA

ADHD is the most prominent neurobehavioral disorder in children ages 5 to 17 years of age with numerous sequelae and consequences for families and society when it is not diagnosed and left untreated. Symptoms have far reaching impact beyond just the classroom. Despite the increased prevalence and general knowledge of an ADHD diagnosis in children and adolescents, debates persist whether treatment is necessary and which course of action is best for the family.

Co-morbid disorders of Oppositional Defiant Disorder, Learning Disabilities and Mood Disorders may complicate the course of treatment and in some instances prevent clinicians from considering the diagnosis of ADHD. The stigma of a psychiatric diagnosis and access to providers remain barriers to proven safe and effective behavioral and pharmacologic treatments for this illness.

This presentation will include review of American Academy of Child and Adolescent Psychiatry (AACAP), the American Academy of Pediatric (AAP) and accepted evidence based treatment guidelines for treating all three subtypes of ADHD. Medication and behavioral treatment options will be discussed.

M1-03 Pharmacological and non-pharmacological treatment of externalizing behavior in children and adolescents

N. Rommelse, L. Henissen, M. Bakker, K. Smeets, V. Ly, C. Greven

Karakter Child and Adolescent Psychiatry, Radboud University Medical Centre, Donders Institute for Brain, Cognition and Behavior; Radboud University Medical Centre Nijmegen; Radboud University Medical Centre Nijmegen; Karakter Child- and Adolescent Psychiatry; Karakter Child and Adolescent Psychiatry, Radboud University Medical Centre, Donders Institute for Brain, Cognition and Behavior

Chair: Dr. Nanda Rommelse, Karakter Child and Adolescent Psychiatry, Radboud University Medical Centre, Donders Institute for Brain, Cognition and Behavior.

Co-chair: Dr. Corina Greven, Karakter Child and Adolescent Psychiatry, Radboud University Medical Centre, Donders Institute for Brain, Cognition and Behavior, Department of Cognitive Neuroscience.

Externalizing behavior problems are common in children and adolescents and include attention deficit and hyperactivity problems (ADHD), oppositional behavior problems (ODD) and delinquent or

conduct problems. Externalizing behavior problems often demand immediate attention, since aggressive behavior, impulsivity or inattention can lead to a variety of problems in different life domains, like expulsion from school and academic troubles, contact with police or justice system, as well as creating substantial costs and public health concerns. To reduce these problems, effective treatment is needed. Both pharmacological and non-pharmacological approaches have been applied to treat externalizing behavior problems in children and adolescents. This symposium focuses on different types of treatment including the use of medication and its effects on cardiovascular health in children and adolescents with ADHD; psychosocial and behavioral treatments in children and adolescents with conduct disorder problems; profiles of responders and non-responders of Cognitive Behavior Therapy to reduce aggression in adolescents; and the role of diet and supplement treatment showing improvements of ADHD and comorbid ODD symptoms.

M1-03-01 Cardiovascular effects of methylphenidate, amphetamines and atomoxetine in children and adolescents with attention deficit hyperactivity disorder

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Many children and adolescents with AD(H)D are using methylphenidate (MPH), amphetamines (APH) or atomoxetine (ATX). However, there is a lack of information regarding the effects of ADHD medication on the cardiovascular system. We have executed the first meta-analysis of clinical trials on medication treatment with data on systolic and diastolic blood pressure or heart rate in children with ADHD. Eighteen clinical trials regarding the use of medication for children with ADHD were evaluated. Results showed an overall small increased effect of APH and ATX on diastolic blood pressure and an increased medium effect on heart rate. Conversely, MPH showed no effect on DBP and HR. All three medications showed an overall small increased effect on systolic blood pressure. The highest changes were reported at short-term. Furthermore, the clinical trials in this meta-analysis showed an overall low percentage (<5 %) of cardiovascular events on individual level, indicating a small number of tachycardia's or hypertension. Considering the evidence that an increased blood pressure and heart rate are risk factors for cardiovascular morbidity and mortality in adults, the use of medication should be followed closely to monitor change in the risk for cardiovascular events among children with ADHD.

M1-03-02 Systematic review and meta-analysis of psychosocial and behavioral treatments in children and adolescents with conduct disorder problems

Mireille Bakker¹, Jan K. Buitelaar^{2,3}, Jeffrey C. Glennon³

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Behavior, Department of Cognitive Neuroscience, Nijmegen, The Netherlands

Conduct disorder (CD) is characterized by repetitive and persistent antisocial behavior towards others, objects and the environment. This meta-analysis evaluates the efficacy of psychosocial treatments at the level of the child, parent, teacher and their combination in successfully treating conduct disorder problems in those with a clinical level of CD problems and/or CD diagnosis. A systematic review was completed including a PubMed, PsycINFO and EMBASE search of peer-reviewed journals between January 1970 and October 2014. From 1517 records, 14 articles satisfied the inclusion criteria. From these Cohen's *d* values as an index of effect size of the primary outcome measure were calculated. Different psychosocial treatments for children and adolescents with CD (symptoms) have been considered. From this meta-analysis it shows that these treatments have small effect sizes (0.23, 95 % CI = 0.13, 0.33) in reducing aggression in both children and adolescents with CD. Effects on internalizing behaviors, peer relationships, and parenting stress were in the same order of magnitude. Some individual studies with much larger effects offered interventions before the age of seven, and involved the parent(s). Overall, sample sizes were small, and use of blinded raters was limited. This meta-analysis suggests that psychosocial treatments have limited efficacy in reducing aggression in children and adolescents with CD. There is much room for improving the methodological quality, as well as the treatment strategy of psychosocial interventions in subjects with CD problems.

M1-03-03 Responder and non-responder profiles of a cognitive behavior therapy to reduce aggression in adolescents

Kirsten C. Smeets¹, Nanda N. J. Rommelse^{1,2}, Floor E. Scheepers⁴, J. K. Buitelaar^{1,3}

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Maladaptive aggression in adolescents is an increasing public health concern. Cognitive Behavior Therapy (CBT) is one of the most common and promising treatments of aggression. However, there is a lack of information on predictors of treatment response regarding CBT. Therefore, a meta-analysis was performed examining the role of predictors on treatment response of CBT. Twenty-five studies were evaluated (including 2,302 participants; 1,580 boys and 722 girls), and retrieved through searches on PubMed, PsycINFO and EMBASE. Effect sizes were calculated for studies that met inclusion criteria. Study population differences and specific CBT characteristics were examined for their explanatory power. There was substantial variation across studies in design and outcome variables. The meta-analysis showed a medium treatment effect for CBT to reduce aggression (Cohen's *d* = 0.50). No predictors of treatment response were found in the meta-analysis. Only 2 studies did examine whether proactive versus reactive aggression could be a moderator of treatment outcome, and no effect was found of this subtyping of aggression. These study results suggest that CBT is effective in reducing maladaptive aggression. More research is needed on moderators of outcome of CBT, including

proactive versus reactive aggression. This requires better standardization of design, predictors, and outcome measures across studies.

M1-03-04 A restrictive elimination diet (RED) in children with ADHD and odd

Verena Ly¹, Nanda N. J. Rommelse^{1,2}, Jan K. Buitelaar^{1,3}

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ADHD has a prevalence of 5–6 % in childhood and about 50 % of all patients still show ADHD symptoms and related impairments in their adult life. This places them at high risk of social and economic disadvantage in the course of their life, and creates a considerable demand for social, educational and healthcare services. ADHD is often treated with psychostimulants. There is a growing societal discussion and concern about year by year increasing prescription rates of medication to children with ADHD. Development and testing of effective and cost-effective alternatives to medication treatment of children with ADHD has thus enormous societal relevance. Food seems to trigger ADHD symptoms in some children and an individually constructed restricted elimination diet (RED) might be an effective treatment for ADHD and comorbid aggression. RED involves a temporary (2–5 weeks) total change of diet, in which the patient is only allowed to eat a few different hypo-allergenic foods (including rice, turkey, lettuce, pears, and water). Thereafter, a 12–18 month reintroduction phase is needed to find out which products trigger ADHD symptoms. The rationale for this diet is that a patient may show adverse reactions to any type of food and that it is important to determine the individual susceptibility to the specific foods that causes adverse reactions. The role of RED as ADHD intervention has been investigated. Modest to substantial improvements in ADHD and comorbid ODD symptoms have been observed. The RED intervention, eliminating the trigger for ADHD symptoms, may be a very cost-effective approach since treatment expenses are almost limited to once-only costs for a complete diagnostic trajectory. In contrast, the use of methylphenidate will pose continuous burdens on the public health care.

M1-04 Pro- and anti-inflammatory mechanisms involved in early-onset psychiatric disorders: evidence and opportunity

C. Moreno, C. Diaz-caneja, J. Leza

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Chair: Carmen Moreno, MD, PhD. Child and Adolescent Psychiatry Department, Hospital General Universitario Gregorio Marañón, CIBERSAM, IISGM, School of Medicine, Universidad Complutense de Madrid, Madrid, Spain.

Most psychiatric disorders, particularly neuropsychiatric disorders including psychotic and affective disorders, may have their onset before adult age. Currently, different biomarkers are being studied to gain understanding of the physiopathology of these disorders. Establishment of biomarkers as soon as possible after disease onset will enable early disease prevention, and thus improve illness prognosis. Besides, research in early stages of illness minimizes the effect of confounding variables, such as chronicity and impact of drugs or psychopharmacological treatments, in research findings. Among the different physiopathological mechanisms involved in early-onset psychiatric disorders, inflammatory processes, related to oxidative stress and immune processes, caused both by external and endogenous factors, have been lately gaining momentum given their implication in most disorders studied. They are also promising research avenues because of their related possibilities for development of new medication strategies. This symposium aims to provide a comprehensive review of inflammation and immune mechanisms implicated in early-onset psychiatric disorders as well as of new designs of treatment interventions, with an special focus on new data from studies on early-onset psychotic and bipolar disorder.

M1-04-01 Inflammatory disbalance in mental illnesses

Speaker: Juan-Carlos Leza. Department of Pharmacology, Faculty of Medicine, Universidad Complutense, CIBERSAM, IIS Hospital 12 de Octubre, Madrid, Spain

Years ago, some authors proposed that inflammatory processes may play a key role in the pathophysiology of main categories or mental illnesses, including psychosis and schizophrenia, mainly based on clinical observations. In the past decade, the use of animal models and the possibilities opened by new fine laboratory methodologies (including in vivo and in vitro molecular biology, gene and image techniques) has been renewed the interest on immune/inflammatory alterations and the associated oxido/nitrosative consequences associated as key pathophysiological mechanisms involved at both peripheral and central nervous system level in these diseases.

Inflammation (from latin *flamma*-ae, *flamme*), is the term used to designate the complex biological response of tissues and cells to face harmful stimuli of different categories: pathogens, damaged cells, trauma or irritants. It is a protective mechanism aimed to remove dangerous elements and to initiate the healing process, but also may be “constitutively” present in areas in permanent interaction with external pathogens (skin, respiratory or digestive mucosae o epithelia). This is a finely process regulated by intra and intercellular mechanisms. Inflammation process occurs in parallel (and many times overlaps) with other local or systemic process of defense against harmful cells or microbes: oxido/nitrosative stress, apoptosis and cell recruitment. Although the brain has been classically considered as an immune- and inflammatory privileged organ (mainly by the presence of brain-blood barrier), there is extensive evidence that excessive inflammation within the brain is directly related to many acute and chronic degenerative disorders, and also there is a crescent perception about its role in some psychiatric diseases, from a neurodevelopmental point of view and also when occurs in adults. In this presentation, general concepts about inflammation in psychiatric diseases will be reviewed: (1) What is inflammation and how is regulated; (2) How to measure intra and intercellular components of the inflammatory response; (3) Mechanisms by which inflammatory dysregulation may lead to cell brain damage; (4) Neuropsychiatric disorders associated with inflammation and increased oxidative stress; (5) The value of inflammation biomarkers as possible trait/state biomarkers of disease; (6) Current status of antiinflammatory agents in psychosis and other diseases; (7) Anti-inflammatory effect of antipsychotic agents; (8) Implications for clinic and research.

M1-04-02**Evidence of inflammatory system alteration in children and adolescents with psychotic and bipolar disorder**

Speaker: Carmen Moreno. Child and Adolescent Psychiatry Department, Hospital General Universitario Gregorio Marañón, CIBERSAM, IiSGM, School of Medicine, Universidad Complutense de Madrid, Madrid, Spain.

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Neural cell membrane pathology mediated by oxidative stress as well as different immune and inflammatory processes have been implicated both in the pathophysiology of schizophrenia and bipolar disorder (Müller and Schwarz, 2008). Changes in oxidative stress and in fatty acid composition of neuronal membrane have been related to clinical evolution but are present in naïve subjects and in those undergoing psychopharmacological treatment (Ranjekar et al., 2003). Cytokines, important mediators of the relationship between CNS and immune system, also present higher levels in patients with both psychotic and bipolar disorder. Most research highlighting the role of inflammation processes in psychiatric disorders has been performed in adult populations. However, if they were already present in children and adolescents with major psychiatric illnesses, that would support new treatment developments in this clinically challenging population.

We have shown the presence of inflammatory processes in children and adolescents with psychotic disorders and bipolar disorders. We have previously reported reduced antioxidant defense, as measured by lipid damage and increased glutathione peroxidase activity in adolescents with first-psychotic episodes compared to control subjects (Micó et al., 2011). In patients with early-onset psychotic disorders, we found higher levels of NFκB and PGE2, and higher levels of PGE2 and iNOS at 6-months follow up at baseline as compared to adults with first-psychotic episodes. During the 6-month follow-up, early-onset patients showed significant increase in PGE2 and TBARS and decrease in d15PGJ2 (Moreno et al., in preparation). Preliminary findings of patients with early-onset bipolar disorder, including subjects with and without psychotic symptoms showed higher levels of MDA and TNFα determinations and a trend for statistically significant differences in IL1β (Moreno et al., in preparation). Taken together, these findings support the existence of inflammatory and oxidative stress alterations in children and adolescents with psychotic and bipolar disorder and support the need of exploring new treatment developments.

M1-04-03**Oxidative stress, inflammation and psychopharmacology development in early-onset psychotic disorders**

Speaker: Covadonga M. Diaz-Caneja, Child and Adolescent Psychiatry Department, Hospital General Universitario Gregorio Marañón, CIBERSAM, IiSGM, School of Medicine, Universidad Complutense de Madrid, Madrid, Spain.

Authors: Covadonga M. Díaz-Caneja (1), Goretti Morón-Nozaleda (1,2), Immaculada Baeza (3), Josefina Castro-Fornieles (3), Montserrat Graell (2), Juan Carlos Leza (4), Carmen Moreno (1), Celso Arango (1).

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In recent years, converging evidence suggests that antioxidant and anti-inflammatory strategies can be useful in the treatment of severe mental disorders. Previous studies from our group have reported reduced antioxidant defense in adolescents with a first episode of early-onset psychosis (EOP) (Micó et al., 2011). Oxidative imbalance in this population has been associated with worse cognitive outcomes (Martínez-Cengotitabengoa et al., 2014) and greater gray matter loss (Fraguas et al., 2012) at 2-year follow-up. This points to the potential usefulness of antioxidant and anti-inflammatory strategies in the management of EOP, at least in one subgroup of patients. The appropriate identification of patients in whom these kinds of interventions could be most effective, could lead to improved clinical and functional prognosis in this population.

In this talk, we will review novel psychopharmacological strategies targeting oxidative stress and inflammatory mechanisms for the management of psychotic disorders and their potential applicability to the treatment of EOP. Add-on aspirin, estrogens and N-acetylcysteine have been found to improve symptoms in adult schizophrenia (Sommer et al., 2014). Positive results have been also reported for minocycline (Oya et al., 2014) and omega-3 fatty acids (Emsley et al., 2002) but diverging evidence calls for further research on these compounds. Evidence for the use of anti-inflammatory strategies in children and adolescents with psychosis is still scarce. NAC administered during adolescence has been recently found to prevent the development of schizophrenia-like traits in a developmental animal model of schizophrenia (Carbungal et al., 2014), pointing to its potential usefulness in the management of high-risk populations and adolescents with psychosis. In this talk, we will also briefly present the rationale and the protocol for a clinical trial comparing NAC with placebo, as an add-on strategy for the treatment of EOP.

M1-05**From research to clinical practice: implementation of autism clinical guidelines in Belgium and The Netherlands**

J. Croonenberghs, A. De Bildt, A. Van Der Sijde

Ukja; Accare; Yulius Autisme

Presenters:

Annelies de Bildt, Accare (Groningen, the Netherlands)

Jan Croonenberghs, UKJA (Antwerp, Belgium)

Ad van der Sijde, Yulius Autisme (Dordrecht, the Netherlands)

Symposium Chair:

Anna van Spanje, Dutch Knowledge Centre for Child and Adolescent Psychiatry (Utrecht, the Netherlands)

M1-05-01 Autism clinical guidelines and clinical practice in Belgium

The Belgian Health Care Knowledge Centre (KCE) recently published a good clinical practice guideline for autism in children and adolescents. It provides an overview of evidence based treatments and interventions that have reached consensus among experts, but also mentions which practices are not supported by research. The guideline recommends developing a customised treatment trajectory for every child. It further sets requirements to the professionals involved in the treatment of the child.

In spite of the scientific foundation of the KCE guideline and the wide array of experts involved in its development, implementation of the guideline might still cause some difficulties. In the current lecture, we will illustrate the developmental process of the guideline and explain how clinical practice is involved. Furthermore, we will discuss issues that may arise during implementation.

M1-05-02 Autism clinical guidelines and clinical practice in The Netherlands

As in many other countries, the Netherlands have autism clinical guidelines for recognition, diagnosis and treatment for children and adults with possible autism. Thus, knowledge has become available on how to recognize possible autism, on what is needed in the diagnostic process, and on which form of treatment is available, recommended and evidence based. Every clinician agrees that guidelines improve the quality and accessibility of care for individuals with possible autism.

However, clinical practice is often more unmanageable than guidelines suggest. Not every clinician uses all parts of the guidelines in daily practice, leading to differences in recognition, diagnosis and care for individuals with possible autism in different regions and between mental health centres.

In this lecture, we will discuss how well autism clinical guidelines are currently being implemented. Are there specific aspects that seem to be successfully implemented? What do clinicians need to implement the guidelines: knowledge, skills, time, etc.? What goes well and what needs improvement? We would like to exchange experiences, and find a way to successfully implement the autism clinical guidelines in all aspects of care.

M1-05-03 Clinical autism guidelines in The Netherlands and Belgium: small distance, small differences?

The Netherlands and Belgium have developed their own autism clinical guidelines. Both are based on relevant and recent international literature on the content of (early) recognition, diagnosis and treatment of individuals with possible autism. Therefore one would expect that the guidelines are quite comparable. Additionally, Belgium and the Netherlands are two countries with approximately the same language. Why did we develop separate guidelines? And how do these guidelines relate to recent guidelines in the rest of Europe? In the current lecture, the Belgian and Dutch guidelines will be compared and differences will be discussed. Issues that will be highlighted are for example the organisation of mental health care, Belgium's bilingualism, and the role of schools.

M1-06-01 Children with SLI have disorganized and deactivated attachment profiles

L. Robel, L. Robel, A. Assous, M. Levy-rueff, G. Rittori, F. Zigante, B. Golse

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Specific language impairments (SLI) are developmental language disorders that can affect both expressive and receptive language. The development of language involves early parent-infant interaction, and is often associated to psychiatric comorbidities and poor social outcome.

Objective: The aim of our research is to investigate the question of attachment in SLI through an experimental paradigm based on the attachment theory.

Methodology: A group of 47 patients aged 4, 6 to 7, 5 years, 12 with an expressive SLI, and 35 with a receptive SLI was included, through our learning disorder clinic. Their attachment profiles and their narrative skills were studied with the Attachment Stories Completion Task developed by Bretherton, as well as their verbal IQ and language skills through specific language evaluations. 29 children were evaluated after 1 year of follow-up on both attachment and language measures. A semi-structure interview was conducted with their mothers, exploring the issue of separation. The attachment representation of 12 mothers was explored with the CA Mir developed by B. PierreHumbert.

Results: The proportion of secure children is significantly smaller in the group of children with SLI (35 %) than in the control group (56 %). They are significantly more deactivated (30 %) and disorganized 31 %. Despite a significant improvement in language skills illustrated by a 15 points increase in VIQ scores, attachment profiles don't change significantly over time, with the persistence of an increase in deactivated and disorganized profiles. The attachment representations of the mothers were not significantly different from the attachment representations of the control population, and were not correlated to the attachment profiles of their child.

Conclusion: Children with SLI have a high proportion of disorganized and deactivated attachment profiles which are stable over time, and not correlated to the severity of language impairment nor to the attachment profiles of their mother. We discuss the therapeutic implications of these results and their relation to the importance of separation issues in the psychic development of these children.

Keywords: SLI, Attachment.

M1-06-02 Psycho-communicative interruptions in hearing-impaired egyptian arabic speaking children

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Abstract: Background: Hearing is critical for normal development and acquisition of language and speech and Hearing impairment exists when there is diminished sensitivity to the sounds normally heard.

Several studies have suggested that one out of every two to three school-aged children with any degree of hearing impairment have academic, social, and behavioral difficulties. Purpose: to compare the degree of hearing loss regarding the psychological profile: behavioral, social, emotional and cognition of hearing –impaired children and then correlate this profile to language scale. Methods: 75 divided equally to three groups, mild, moderate and severe hearing impaired Egyptian Arabic speaking children aged between 6 to 8 years were included in this study and were subjected to psychometric evaluation, audiological assessment, Arabic language scale, and Social-Emotional assessment questionnaires (Arabic version). Results: Hearing-impaired children showed more language, emotion, and behavioral difficulties, and spent less time communicating than children with normal hearing. The lowest academic, social, and behavioral scores were in severe hearing impaired group than in the other two groups Conclusion: Even slight/mild hearing impairment can result in negative consequences in the psychological profile, behavioral, social, and emotional and there is significant relationship between delayed language, anxiety, and child behavior problems. Without appropriate interventions, these children are at risk of developing mental health disorders.

Keywords: Hearing impairment, Psychological profile, Language, Speech.

M1-06-03 Co-occurrence of developmental and emotional/ behavioral problems in children born moderately to late preterm

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Objective: To determine the co-occurrence of developmental delay and emotional/behavioral problems (EBP) in moderately to late preterm-born children (MLP; 32–36 weeks' gestation), and to compare this co-occurrence with that in term-born children.

Methods: Study participants were recruited from 13 randomly selected Preventive Child Healthcare (PCH) centers from across the Netherlands. We included 903 MLP children and 538 term-born children, born between January 2002 and June 2003. Parents completed the Ages and Stages Questionnaire (ASQ) and Child Behavior Checklist (CBCL), just before the scheduled PCH visit at age 4 years. In logistic regression analyses, we used a composite measure of co-occurrence: ASQ total or domain score >2 SD below mean of Dutch reference group and CBCL score >84 th percentile (subclinical cut-off) on total, internalizing (emotional) or externalizing (behavior) problems.

Results: Prevalence rates of clinical-range externalizing and internalizing problems were 22.5 and 19.7 %, respectively, in MLP children with overall developmental delay, compared to 4.8 and 14.3 % in term-born children with developmental delay. Regarding domains of developmental delay, problem-solving frequently co-occurred with externalizing problems (36.0 %; subclinical cut-off), and personal-social skills with internalizing problems (38.7 %; subclinical cut-off). MLP birth was significantly associated with an increased risk of co-occurrence, also after adjustment for gender, socioeconomic status, maternal age and descent of mother (OR 1.86; 95 % CI 1.14 to 3.03; $p = 0.013$).

Conclusions: MLP children with developmental delay frequently have EBP at preschool age, with rates varying from a quarter to a third depending on the type of delay. The risk of co-occurring problems is significantly higher in MLP children than in term-born children.

M1-06-04 Family adjustment when an infant has a serious illness: putting research into practice

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Aims: To identify risk and resilience factors in families of infants with serious physical illness, to inform clinical practice in the care of these children.

Methods: This is a mixed methods one-year prospective cohort study. Parents of infants with newly diagnosed serious liver disease completed four self-report measures assessing family function (Family Assessment Device), impact of the infant's illness on the family (Impact on Family Scale, IFS), fathers' engagement in the care of the infant (Dads Active Disease Support Scale) and parent psychological symptoms (Depression, Anxiety, Stress Scale), as well as a parent interview. The measures were repeated 12 months later with the addition of the Child Behavior Checklist (CBCL).

Results: Thirty-seven families participated. Mean scores on all self-report measures were comparable with normative data. Hierarchical multiple regression was performed to investigate which family characteristics predicted infant behavioral and emotional outcomes. Birth order, age at diagnosis, number of outpatient visits, and child's diagnosis accounted for 37 % (mothers, $P = 0.01$) and 32 % (fathers, $P = 0.03$) of the variation in CBCL. The impact of the infant's illness on the family explained an additional 17 % of the variation (for mothers, $P = 0.002$) and 12 % (for fathers, $P = 0.02$). The total variance explained by the final model was 54 % for mothers ($P < 0.001$) and 43.5 % for fathers ($P = 0.006$).

Thematic analysis of the interviews revealed several important themes: adjustment to the infant's illness; effects of the illness on family relationships; and family experiences with other families whose child had a similar illness. Those families who reported difficulty adjusting also identified more problems on the CBCL and rated a higher impact on the family of the infant's illness. Families with reduced social contact also rated greater impact of the illness on the family. Contact with other families who have a sick child is often positive when the parents feel that their child is doing well, but was negative if parents had no contact with other families with a sick child or were in contact with families whose children then died.

Conclusions: Parent report of the impact of the illness on the family (IFS) combined with clinical interviews of parents about the family's adjustment, changes in social contact, and experiences with other families who have a sick child are important indicators of future emotional outcome for infants with a serious physical illness.

M1-07 Ideas worth spreading in CAP: Pharmacotherapy...(always) in the framework of multimodal treatment

M1-07-01 In anxiety disorders

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Background: Anxiety disorders are among the most frequent psychiatric disorders in youth, with community studies suggesting a prevalence between 9 and 32 % before the age of 18. Separation, generalized, and social anxiety disorders are the most common. Anxiety disorders typically have a significant negative impact on school, relationships and leisure activities. Often one anxiety disorder is comorbid with another anxiety disorder, depression and/or behavioral disorders, which worsens the patient's quality of life and prognosis. Childhood-onset anxiety disorders frequently persist into adulthood and increase the risk of future psychiatric disorders, including mood and substance use disorders.

Aim: Early detection and treatment of anxiety disorders can prevent the impairment during childhood, and also the later development of adult psychiatric illness. The majority of youth with anxiety disorders does not access clinical services, lacking therefore diagnosis and consequent treatment.

Methods: The presentation will offer the practical approach taken by the speaker for these conditions, always considering the current evidence-based knowledge to diagnose and treat anxiety disorders in youth.

Results: The challenge in diagnosing an anxiety disorder is distinguishing pathology from 'normal' developmentally appropriate fears and worries, on the basis of the severity and persistence of symptoms, and the impairment they provoke. A diagnosis is essential as a first step for treatment. The most commonly evaluated treatments for anxiety disorders in youth are psychological approaches, especially cognitive behavior therapy (CBT). One of the most used CBT programs is Kendall's 'Coping Cat', and recently, research is targeting "low-intensity" CBT based interventions, where parents are trained and guided by experienced therapists, to help their children overcome their anxiety. For moderate or severe anxiety, selective serotonin reuptake inhibitors (SSRIs) are the pharmacological treatment of choice because of their effectiveness and safety profile. Combination treatment, SSRIs and CBT, has been found to be more effective than either treatment alone. Benzodiazepines are effective, but have not been systematically evaluated in youth. Furthermore experts raise concerns about dependency and side effects, so their use is not recommended in children.

Discussion: CBT, SSRIs and their combined use are all recommended options for the treatment of anxiety disorders in youth. Treatment is usually very effective in preventing current and future negative impact. It is our responsibility to identify and help affected youth to overcome anxiety disorders.

M1-07-02

In attention deficit hyperactivity disorder

D. Coghill

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Background: Rates of diagnosis and treatment of ADHD in the US frequently exceed epidemiological estimates of prevalence. Whilst some countries e.g. Germany, Iceland and the Netherlands also have relatively high rates of diagnosis in most other European countries ADHD is considerably under diagnosed and treated. As a consequence it is likely that most of those receiving a diagnosis are at the more severe end of the ADHD spectrum and meet criteria for hyperkinetic disorder as defined by ICD 10. It is now generally agreed that for these more severe cases medication should form part of a comprehensive treatment package. However there are also questions about the effectiveness and safety of medications in the long term.

Aim: To describe an integrated evidence based approach to the management of ADHD that addresses both the core and associated aspects of the disorder.

Methods: The presentation will comment on the current evidence-base regarding the efficacy and effectiveness of pharmacological and non-pharmacological treatments for ADHD in relation to core and coexisting symptoms, cognition, impairment and quality of life. The principal elements of multimodal treatment, and monitoring treatment, will be described, using the Dundee ADHD Care pathway as an example.

Results: The long term outcomes of ADHD will be discussed and suggestions on how to improve these in everyday clinical practice will be made.

Discussion: Child and adolescent mental health practitioners must get used to routinely measuring outcomes and resist temptations to see disorders in isolations or to dichotomise pharmacological and non-pharmacological approaches. Real progress can come from carefully planned and executed integrated treatment approaches.

M1-07-03

In early onset schizophrenia

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Background: Treatment of early onset schizophrenia is far from optimal in many European countries. While efficacy and safety data on antipsychotic treatment in early onset psychosis provide some guidance for clinicians, research on psychotherapy and integrated care is sparse.

Aim: To share and discuss some basic thoughts on the role antipsychotics play in the need-adapted integrated care of patients with early onset schizophrenia

Methods: These basic thoughts, representing personal clinical practice, will be discussed in the framework of the evidence for antipsychotic treatment and psychotherapy as well as some European guidelines for the treatment of early onset schizophrenia.

Results: Commonly, early onset schizophrenia in adolescents is detected and treated late, and efforts should be made to detect psychosis earlier in order to—amongst others—avoid seclusion and restraint in highly acute states; if detected the first task of the clinician is to engage the youngster and his family in a trusting relationship and to understand his/his family's problems, hopes and resources. If the first contact to the mental health system is too "medicalized", patients and families feel powerless, and antipsychotic treatment is less likely to be effective or at least less likely to be adhered to. Continuity of care—although difficult to provide in many mental health systems and especially in more rural areas—is of importance for the treatment of early onset schizophrenia, a treatment that must include a multimodal approach.

Discussion: There is still a lot to do to optimize real life antipsychotic treatment in the framework of a comprehensive treatment plan in terms of both research and implementation of recommended principals of care.

M1-07-04

In autism spectrum disorder

J. Fuentes

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Background: The frequency of identified Autism Spectrum Disorder is much higher than it was anticipated, with numbers depending on countries and methodology for identification. Prevalence oscillates between 1/38 (South Korea)—1/68 (USA) and 1/100 (UK). This increase may be due to changing and broadening diagnostic criteria and earlier diagnosis, as well as social influences including general medical and public awareness. ASD constitutes now a disorder that deserves considerable attention in child and adolescent psychiatry units.

Aim: To reflect that although there is not yet any specific medical treatment for ASD, psychotropic medication can be inappropriately used in general and/or for the diverse comorbidities that often associate with the disorder.

Methods: The presentation will review the current age-appropriate, evidence-based practice in ASD and the need to regard other outcomes beyond cure, such as quality of life, social integration, human rights and personal satisfaction. The principal elements of multimodal treatment, including also psychopharmacological intervention, will be described, quoting as an example the practice followed in a regional program in Northern Spain.

Results: The great variation in different countries and programs in the use of psychotropic medication for this population reflects, in the view of the speaker, that too often these medications are utilized as a way to cope with deficient resources or lack of training. Medication, when well combined with education and social support, generates consistent positive outcomes for these citizens.

Discussion: Child and adolescent psychiatrists must update their knowledge about ASD, follow available international guidelines, embed psychopharmacology in the multimodal treatment of these conditions, and empower stakeholders in their struggle to obtain adequate community based services.

M2

Developmental trajectories in early-onset psychoses: a window for prevention?

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Psychiatry has traditionally been based on tertiary prevention, whereas scientific evidence gathered these past decades should move our field toward the more ambitious primary and secondary prevention and promotion of mental health. Although there has been a recent increase of interest in earlier detection and treatment of mental disorders including conditions such as psychoses, there is a gap between our recently acquired knowledge about ways to promote mental health, primary and secondary prevention, and public health, and clinical initiatives to pursue them.

Potentially preventable variables such as poor nutrition, exposure to drugs, infection, or toxic substances during pregnancy, obstetric complications, maternal depression during pregnancy or after delivery, parental neglect, bullying, physical, emotional, and sexual abuse, social discrimination, cannabis use, and other forms of trauma and lack of stimulation have an impact on the risk of developing mental disorders and psychotic symptoms. In fact epidemiological studies show that the symptoms that are part of the many different diagnostic categories are present in the general population, sometimes as state phenomena, but sometimes as trait phenomena with cumulative effects.

One of the major advances in mental health research in recent years is the understanding that there may be risk factors not mapped by the present diagnostic categories. Many of these risk factors – whether at the level of aetiology or pathophysiology – seem to increase the likelihood of many different DSM or ICD mental

disorders. There are no apparent risk factor “silos” for the current diagnostic criteria, as there seem to be different neurodevelopmental trajectories leading to a wide range of final outcomes in terms of mental disorders. This opens an optimistic window of opportunity for a preventive approach. If only we could prevent someone who is at risk for or who is already undergoing very early abnormal neurodevelopment from ending up with a disorder that will impose an even greater burden by intervening in the process of anxiety, depression, bipolar disorder, schizophrenia, or autism. While the treatment of early mental distress may prevent transition to a mental disorder, it could also mean that, in the long run, the mental disorder (if it develops) causes less disability, either because it is a disorder generally associated with less burden (e.g. depression vs schizophrenia) or because, within the same disorder, it has less severity (e.g. mild rather than moderate major depression, with or without psychotic symptoms, etc.).

M3-01

Parental mental health and early childhood development: why should we assess withdrawal behavior in infants?

Guedeney A.

Hospital Bichat Claude Bernard APHP. Paris

More and more often we as child psychiatrist and psychologists have to deal with mentally disordered parents. On the other hand, we are requested to assess developmental disorders in young children. In order to unfold the ‘still mysterious unfolding of early psychopathology’, as Peter Fonagy states it, we have to assess the development of the child and its symptomatology, the mental health of both parents and the parent infant relationship. The key point is to assess the different dimensions of functioning in the child, as well as their mutual influences and to assess independently the development of the child, the parent child relationship and the parental caregiving abilities, without inferring one from the others.

Social withdrawal behavior in the young child is therefore an important alarm signal to acknowledge for, as it appears to be the response of the child to the difficulty to maintain synchrony within the relationships (Ruth Feldman). This may stem from the child – (ASD, Pain, sensory difficulty, genetic disorder..) from the relationship with parents (post natal depression, lack of synchrony, failure of repair, improvable or violent relationships). The ADBB scale may be useful to screen for social withdrawal behavior in infants. Three situations are presented in which there is a definite risk for parental distress and for difficulties in parent infant synchronization: prematurity, Prader-Willy syndrome, Palate cleft syndromes. Studies with infants in those situations show high levels of social withdrawal behavior, as well as high levels of parental stress and depression, but highlight the fact that the majority of infants and parents still succeed in resisting to those adverse conditions, through a phase of difficult adaptation. Early intervention may prove very helpful to increase resiliency in parent and infants.

M3-02

Tackling cultural issues in adolescent mental health

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Centre for Child and Adolescent Mental Health (CCAMH). Nigeria

Culture affects and influences all domains of human life including mental health or wellness, as well as mental illness. In relating culture to adolescent mental health and illness, a major challenge may be with the attempt to define adolescence in the light of various cultural influences on human development. This may prove to be disadvantageous to the adolescent experiencing rapid physical, psychological and social changes within a culture where this phase of life lacks definition and focused study.

Culture impacts help-seeking behaviour, pathways to care, the choice of who, where and when to approach for care, the process of care and the overall management of the individual seeking care. The social context within which illness develops also has an important effect on how it is interpreted and managed. This address identifies various avenues through which culture interacts with adolescents through the mental health spectrum, from the experience of wellness to mental health problems, mental illness and disability. The possible impact of culture on adolescents' feelings of mental wellness, mental illness, presentation, care pathways, therapeutic relationships and gender roles are illustrated in the context of mental health and illness. Available evidence suggests that cultural variations of symptomatology, the context within which illness is experienced and variations in pathways of care during the critical period of adolescence affect mental health outcomes.

M3-03 **Intervention and prevention of cannabis use in adolescents**

Faggiano F.

Università del Piemonte Orientale – Novara, Italy

In Europe, cannabis is used at least monthly by 20% of students aged 15-16 (Espad 2011). These data raise our concern for many reasons: cannabis is an addictive substance, and has been associated with several health consequences, like psychosis, other psychiatric symptoms, attention deficit etc. Cannabis users was the most frequently drug reported as reason for entering treatment, although with large variations among countries. Cannabis is considered a gateway drug, giving access to use of other drugs.

Only a minority of cannabis users experience these effects, and usually those with a more intensive use. However the prevention interventions usually address first use of cannabis, instead of the progression from experimentation and intensive use, and this is because the knowledge about the determinants of progression is lacking or very weak.

Adolescence is the life period during which most part of young people start do use drugs, and for these reasons school is a privileged setting for prevention.

The study of the determinants of adolescent behaviors is the base for prevention interventions. Risk protective factors more frequently addressed by interventions are peer influence, communication skills, knowledge, refusal skills. Indeed, most part of intervention are based on the development of life skills to tackle these factors.

Most effective interventions are based on a mix of theories, including social learning (Bandura 1977) and social norms theories (Durkeim 1951), but also on psychological vulnerability (Sher 2000). The average effect size of such interventions is around 30% (RR=0.7), with large variations among interventions (Faggiano 2014).

The effectiveness of interventions could probably be strongly improved if they are implemented together of other kind of interventions acting on the environment, not only focused on cannabis prevention, but also on tobacco and alcohol consumption, considered to be gateway drugs for cannabis use.

M4 **How malleable is autism? Outcome studies from the youngest children with ASD**

Rogers S.

UC Davis MIND Institute

For most of the time since its recognition, autism spectrum disorder has been understood as a biologically based, severe and chronic neurodevelopmental disorder affecting virtually all areas of development and beginning in earliest childhood. Initial reports of major changes due to behavioral treatment were met with skepticism or disregard. However, current emphasis on early detection of ASD reflects the increasing data suggesting that high quality developmental/behavioral interventions in earliest childhood can significantly alter the course of ASD and related impairments for many children and families. This talk will focus on the evidence that supports these views and the characteristics of the most successful intervention approaches, and responders.

M5 **New developments in the diagnostics and treatment of adolescent eating disorders**

Herpertz-Dahlmann B.

RWTH Aachen University. Germany

Eating disorders are some of the most prevalent disorders in adolescence, often taking a chronic and disabling course. The incidence rates in this age group continue to rise. The lecture will introduce the main eating disorders anorexia nervosa (AN), bulimia nervosa (BN) and binge eating disorder (BED) with an emphasis on adolescent and childhood AN. Every clinician working with adolescents should be familiar with their symptomatology and medical/psychiatric assessment. The aim of this presentation is to convey basic knowledge on the disorders, as well as to review new developments in classification issues resulting from the transition to DSM-5. New data on epidemiology and transcultural changes in the prevalence of these disorders as well as recent knowledge on their etiology are provided. The lecture tries to give a profound insight into new developments in treatment, such as nutritional rehabilitation and education, individual and family therapy as well as pharmacotherapy and neuropsychological strategies. Severe and prolonged starvation can have profound consequences on brain and bone development. Although the evidence-base is still weak, there are some promising new approaches which might improve the outcome of these severe disorders.

M6-01 **Innovations in tic disorders**

Apter A., Hoekstra P.

Schneider Childrens Medical Center, Sackler School of Medicine, Tel Aviv, Israel; University Medical Center Groningen, Groningen, The Netherlands

Chairs: Prof. Alan Apter Dr. Pieter Hoekstra

Overview: This symposium will focus on various aspects of tic disorders that are currently being investigated in Europe. The talks will focus on new developments in the pharmacological treatment of tics,

on the relationship between obsessive compulsive disorders and behaviors of tics, on the use of exposure and response prevention in the treatment of tics, on acceptance of the premonitory urge as a focus for treatments and on the role of aggression in the treatments. The role of the chairman will be to try and integrate this various aspects and to generate research questions for the future.

M6-01-01 Pharmacological interventions in Tourette syndrome

Benaroya-Milshtein N., M.D., Ph.D

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Tic disorders including Tourette syndrome (TS) are neuropsychiatric disorders with prevalence up to 3–4 % for chronic motor or vocal tic disorders and 1 % for TS. The first line treatment for all tic disorders is psycho-education. Psychological and/or pharmacological interventions should be considered in addition to psycho-education for persons with clear impairment associated with the tics.

This talk will give an overview of current pharmacological treatment options of tic disorders and Tourette Syndrome (TS). The main concern in this field is that standardized and large drug trials fulfilling evidence based medicine standards are still scarce. In general, tic disorders treatment decisions are often guided by individual needs and personal experience of treating clinicians. Therefore, present recommendations from international guidelines are based on both scientific evidence and expert opinion.

Typical antipsychotics (Haloperidol and Pimozide) are the only FDA approved medications for tic disorders. From the atypical antipsychotic Risperidone has the best evidence level, and was found to be as effective as Pimozide. Aripiprazole has still limited but promising data with lower risk for adverse reactions. Antipsychotic medications have many side effects; medical follow up is therefore needed. Sulpiride and Tiapride have largest clinical experience in Europe and lower rate of adverse reactions, so they are both recommended. Tetrabenazine is also in clinical use for tic disorders and for other movement disorders, although may also have unwanted side effects.

In TS patients with comorbid attention deficit hyperactivity disorder (ADHD) atomoxetine, stimulants or clonidine should be considered, or, if tics are severe, a combination of stimulants and antipsychotic.

When mild to moderate tics are associated with obsessive compulsive symptoms, depression or anxiety sulpiride monotherapy can be helpful. In more severe cases the combination of antipsychotics and a selective serotonin reuptake inhibitor should be given.

In summary, pharmacological intervention in tic disorders should take into consideration both comorbidities and side effects. Further randomized, double-blind, placebo-controlled trials over longer periods are needed to enhance the scientific basis for drug treatment in tic disorders.

M6-01-02 OCD/OCB in Tourette syndrome

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Keywords: Tourette syndrome, Tics, Obsessive compulsive behavior, Obsessive compulsive disorders, OCD.

Obsessive compulsive behavior (OCB) is a common and typical symptom that occurs in 50–80 % of patients suffering from Tourette syndrome (TS) and other chronic tic disorders. In most patients, OCB is mild and does not fulfill diagnostic criteria for obsessive compulsive disorder (OCD) according to DSM-5. However, 10–30 % of patients suffer from severe OCD. In these patients, comorbid OCD often impairs patients' quality of life more than other psychiatric comorbidities such as attention deficit hyperactivity disorder (ADHD) or the tics. Most typically, tics start at age 6–8 years, while OCB starts later in the course of the disease, most often at the age of 15 years. In patients with TS, by far the most common OCB is a just-right feeling (in up to 80 % of patients). Other typical OC symptoms in TS are touching things or other people, checking, smelling, ordering, and rituals. In contrast, washing is an uncommon OCB in TS. In addition, OCB can occur in combination with the performance of a tic. For example, some patients have to repeat a tic again and again, until it feels “just right” or until a “correct” number is reached or a specific noise occurred or a “special” symmetry emerged. However, in some cases it is impossible to differentiate between a complex motor tic and an OCB, for example, when the patient performs a “complex” movement such a stroking his hair down.

Treatment of OCD in patients with TS does not differ from treatment strategies in patients with pure OCD (without tics). However, there is some evidence that behavioral therapy is less effective in OCD patients with comorbid tics. In patients with severe tics plus clinically relevant OCD, a combined pharmacotherapy including antipsychotics (for the treatment of tics) and serotonin-reuptake inhibitors (for the treatment of OCD) is inevitable.

M6-01-03 Exposure and response prevention in the treatment of tics in children and adolescents

Cara W. J. Verdellen, PhD

Clinical Psychologist HSK Group Inc., Arnhem, The Netherlands

In European guidelines, both habit reversal and exposure and response prevention are recommended as first line interventions for tic disorders [1, 2]. Habit reversal, the oldest intervention for tics, consists of an awareness training, followed by a competing response training to prevent or inhibit the tic. Exposure and response prevention consists of prolonged exposure to premonitory sensations during response prevention of all tics, thus providing the opportunity to habituate to the sensations. However, despite evidence and availability of treatment manuals, many patients do not receive a behavioural treatment for tics [3–5]. Reasons are unfamiliarity with these interventions (especially exposure and response prevention), misconceptions about the consequences of a behavioural treatment for tics, and a lack of trained therapists in delivering these interventions. This gap between science and practice needs to be bridged. The present lecture focuses on increasing awareness and knowledge of exposure and response prevention for tics.

References

1. Roessner V, Rothenberger A, Rickards H, Hoekstra P, The ESSTS Guidelines Group (eds) (2011) European clinical guidelines for Tourette Syndrome and other tic disorders. Part I–IV. *Eur Child Adolesc Psychiatry* 20:153–217.
2. Verdellen C, van de Griendt J, Hartmann A, Murphy T, The ESSTS Guidelines Group (2011) European clinical guidelines for Tourette syndrome and other TIC disorders. Part III: behavioural

and psychosocial interventions. *Eur Child Adolesc Psychiatry* 20:197–207

3. Verdellen C, van de Griendt J (2012) Survey presented at ESSTS meeting Catania). In: Awareness and application of European clinical guidelines for TIC disorders among ESSTS members
4. Verdellen C, van de Griendt J (2014) Survey presented at TS association meeting Utrecht). In: Awareness, use and preference of treatments for tics among Dutch Tourette syndrome patients and their parents
5. Woods D, Conelea C, Walther M (2007) Barriers to dissemination: Exploring the criticisms of behavior therapy for tics. *Clin Psychol Sci Pract* 14:279–282

M6-01-04

Acceptance of premonitory urges and tics

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Abstract: Premonitory urges (PU) often precede motor and vocal tic expression, and are relieved by completion of the tic. PU are often reported as even more bothersome than tics. However, most treatments for tic disorders focus more on tics rather than on PU. The study objective was to examine the effect of an acceptance based procedure on PU. Forty five participants, aged 8–17, diagnosed with Tourette syndrome (TS) completed the trial. The procedure included three conditions (neutral, tic suppression, and urge acceptance). For each condition, participants were trained to increase their awareness of the PU, and then to monitor PU frequency according to intensity. After each condition participants completed a discomfort level numeric rating scale. Results indicate that urge acceptance significantly reduces discomfort caused by the urges. In addition there was also decreased frequency and intensity of urges during acceptance compared to the other conditions. Examining the specific relation between acceptance and premonitory urge may contribute to an understanding of the difference between the effects of tic suppression and urge acceptance on the PU experience, and potentially lead to new insights regarding therapy. More specifically it appears that nuances of PU interpretation can reduce the frequency, intensity and discomfort caused by the PU and that optimal treatment requires a balance between acceptance and suppression.

Keywords: Tic disorders, Premonitory urge, Acceptance, Tics, Discomfo.

M6-01-05

5: Tourette Syndrome and aggression—why are kids with tics prone to “rage attacks”?

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Introduction: Besides the fact that “rage attacks” (RA) is not a diagnostic term in the classification systems DSM-5 or ICD-10, every

clinician dealing with Tourette Syndrome (TS) patients and most affected families can immediately relate to the phrase. A significant number of clinically referred subjects with TS, especially children and adolescents, seem to be affected by behavioral abnormalities characterized by rage attacks (RA), meaning: sudden and unpredictable anger, irritability, temper outbursts, and also aggression up to marked verbal and physical violence.

In general, anger attacks are also fairly common in another patient group, namely subjects with major depression as shown in several studies.

In preparation for a case control study investigating the pathophysiological background of RA in TS by means of MRI and MR spectroscopy a thorough electronic literature research has been conducted with special consideration of the potential role of internalizing disorders such as depression and anxiety.

Methods: Articles in English and German language were considered in MEDLINE/PubMed and other data bases (years 1985–2014) with different combinations of the following key words:

Tics, aggression, rage attacks, Tourette Syndrome, ODD, conduct disorder, affective disorder, depression, anxiety

Results and Discussion: Among clinically referred patients with TS, RA occur in 23 to 40 %. RA are probably caused by a number of environmental and biological factors. Research on these etiological determinants in TS patients are scarce. RA seem to be highly correlated to the comorbidities ADHD and OCD, to early onset of tics, tic severity and prenatal exposure to tobacco. Little is known about internalizing disturbances and RA in TS patients.

M6-02

The early start Denver model for children with autism—part 1: measuring developmental trajectories

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Chairs: Marie Schaer and Sally Rogers

General overview

As of today, early intensive intervention is the most effective treatment for improving outcomes of children with Autism Spectrum Disorders (ASD). The Early Start Denver Model (ESDM) is a recent intensive approach for children with ASD aged below 3 years old, and aims at facilitating the development of social competences and language skills in affected children with 14 peer-reviewed research publications describing its effects. In this symposium, four researchers will describe efforts related to early identification and early effective treatment of young children in European settings. Sally Rogers will describe implementation challenges when moving across cultures, international efforts already in place, and data resulting from several non-US studies. Martina Franchini will show how eye-tracking paradigms of social orienting collected in Switzerland help to identify ASD very early on, and how these measures might be used to follow-up children who benefit from early intervention by quantifying longitudinal trajectories of social orienting. Marie Schaer will describe EEG and eye tracking paradigms that may further our understanding of the mechanisms by which intensive intervention effects various subgroups of children, including those whose developmental trajectories markedly improve, to adapt, use, and study ESDM in countries outside the USA. Finally, Marie-Maude Geoffroy will describe a new government funded randomized controlled trial to

assess the effectiveness and cost-efficiency of the ESDM in different centers of French-speaking countries (France, Switzerland and Belgium).

Individual presentations

- Sally Rogers (MIND Institute, UC Davis, Sacramento, California, USA): Efforts, challenges, and results from initial cross-cultural adaptations of an American intervention model
- Martina Franchini (Office Médico-Pédagogique, University of Geneva, Geneva, Switzerland): Measuring social orienting to aid early diagnosis of young children with Autism Spectrum Disorders and to quantify the effect of therapeutic interventions
- Marie Schaer (Office Médico-Pédagogique, University of Geneva, Geneva, Switzerland): Can eye-tracking and EEG measures represent realistic biomarkers to help identifying subgroups of children with different outcomes, or to monitor clinical improvements associated with therapeutic interventions?
- Marie Maude Geoffroy (Centre Hospitalier Le Vinatier, Bron, France): Impact of the Early Start Denver Model (ESDM) on the development of children with autism spectrum disorder (ASD) in a European French-speaking population: a novel ecologic multi-center study design.

Chairs: Marie Schaer and Sally Rogers

General overview:

As of today, early intensive intervention is the most effective treatment for improving outcomes of children with Autism Spectrum Disorders (ASD). The Early Start Denver Model (ESDM) is a recent intensive approach for children with ASD aged below 3 years old, and aims at facilitating the development of social competences and language skills in affected children with 14 peer-reviewed research publications describing its effects. In this symposium, four researchers will describe efforts related to early identification and early effective treatment of young children in European settings. Sally Rogers will describe implementation challenges when moving across cultures, international efforts already in place, and data resulting from several non-US studies. Martina Franchini will show how eye-tracking paradigms of social orienting collected in Switzerland help to identify ASD very early on, and how these measures might be used to follow-up children who benefit from early intervention by quantifying longitudinal trajectories of social orienting. Marie Schaer will describe EEG and eye tracking paradigms that may further our understanding of the mechanisms by which intensive intervention effects various subgroups of children, including those whose developmental trajectories markedly improve, to adapt, use, and study ESDM in countries outside the USA. Finally, Marie-Maude Geoffroy will describe a new government funded randomized controlled trial to assess the effectiveness and cost-efficiency of the ESDM in different centers of French-speaking countries (France, Switzerland and Belgium).

Individual presentations

- Sally Rogers (MIND Institute, UC Davis, Sacramento, California, USA): Efforts, challenges, and results from initial cross-cultural adaptations of an American intervention model
- Martina Franchini (Office Médico-Pédagogique, University of Geneva, Geneva, Switzerland): Measuring social orienting to aid early diagnosis of young children with Autism Spectrum Disorders and to quantify the effect of therapeutic interventions
- Marie Schaer (Office Médico-Pédagogique, University of Geneva, Geneva, Switzerland): Can eye-tracking and EEG measures represent realistic biomarkers to help identifying subgroups of children with different outcomes, or to monitor clinical improvements associated with therapeutic interventions?
- Marie Maude Geoffroy (Centre Hospitalier Le Vinatier, Bron, France): Impact of the Early Start Denver Model (ESDM) on the development of children with autism spectrum disorder (ASD) in

a European French-speaking population: a novel ecologic multi-center study design.

Individual abstracts:

1. Presenting author: Sally Rogers

M6-02-01

Efforts, challenges, and results from initial cross-cultural adaptations of an American intervention model

Background: Early behavioral intervention is currently the most efficacious intervention that exists for improving the course of children with ASD. Until recently, the most efficacious model of a comprehensive intervention approach was that developed by Lovvaas and carried out by his colleagues. A new approach, The Early Start Denver Model, which fused intervention practices distilled from current developmental and relationship science with those of applied behavior analysis was introduced in 2010 through results of a rigorous controlled trial [1] and a manual and curriculum describing its use [2]. Fourteen empirical studies have been published thus far. The developmental aspects of the model and its efficacy have attracted motivated parents, clinicians and scientists to implement and study ESDM in several continents, but cross-cultural implementation of manualized treatments is a complex enterprise. Information from projects in China, South Africa, Japan, Mexico, and studies from Australia, Canada, and Italy will be shared.

Methods: ESDM studies in other nations use a variety of methods, including intensive 1:1 delivery in clinic settings, group treatment in both inclusive and specialized day care and preschool settings, and parent coaching models. Choice of delivery method is influenced by both cultural and economic factors, and each delivery method uses a research paradigm individually fitted both to model, culture, and current research expertise in a setting. These will be described.

Results: Results from the Australia studies and preliminary findings from Italian and Canadian studies will be shared.

Conclusions: Implementation of early intervention models across nations and cultures requires adaptations in published models and strong scientific and clinical leadership to address the methodological, economic, and cultural profiles of adopting and assuring effectiveness of foreign models. Compared to the lengthy process required to build an effective intervention from the ground up, cross-cultural adoption can significantly speed up delivery of effective interventions to community children and families while reducing costs.

2. Presenting author: Martina Franchini

M6-02-02

Measuring social orienting to aid early diagnosis of young children with autism spectrum disorders and to quantify the effect of therapeutic intervention

Martina Franchini^{1,2}, Hilary Wood¹, Bronwyn Glaser¹, Edouard Gentaz², Stephan Eliez^{1,3}, Marie Schaer^{1,4}

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Background: According to the social motivation theory in autism (reviewed in [1]), a lack of social orienting (e.g. attention to biological motion or faces) explains part of core symptoms in autism (e.g. joint attention). Eye-tracking studies show promise to quantify social orienting very early and, thus, to aid early detection of autism. As well, it represents a good candidate as indicator of early interventions efficacy [2].

Methods: We recruited 25 children with ASD (mean age 3.2 ± 1.2 years old), and 20 typically developing children (TD, mean age 3.0 ± 1.5 years old). Part of the children with ASD received early interventions based on the Early Start Denver Model. We quantified social orienting using an eye-tracking task with a paradigm inspired from the one by [2], using a split screen with simultaneous biological motion and geometrical motion. Measures of initiation and response to joint attention were collected using the Early Social Communication Scale (ESCS [3]).

Results: Replicating results by Pierce et al., we found that, as a group, children with autism orient less on biological motion compared to TD ($t = 3.48$, $p = 0.0012$). Important heterogeneity was, however, observed in the ASD group. Time spent on biological motion correlate positively with initiation of joint attention behaviors at the ESCS ($r = 0.508$). Preliminary results further suggest that orientation to biological motion at baseline can predict clinical improvement at follow-up.

Conclusions: Our results support the view that reduced orientation on biological motion represents a good candidate for the quantification of social orienting in young children with ASD. Lack of orienting on biological motion and correlation between orienting on biological motion and joint attention behaviors confirms the importance of social orienting in early autistic development. If our results are confirmed, orienting and joint attention behaviors before the introduction of therapeutic intervention could help to predict social and clinical outcome in affected children.

3. Presenting author: Marie Schaefer

M6-02-03

Can eye-tracking and EEG measures represent realistic biomarkers to help identifying subgroups of children with different outcomes, or to monitor clinical improvements associated with therapeutic interventions?

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Background: The last decade witnessed the development of standardized approaches for the treatment of autism spectrum disorders (ASD). Based on the recognition that social deficits are core symptoms in ASD, intensive interventions targeting the development of social competences in very young children with autism have been proposed (e.g. the Early Start Denver Model). Clinical studies have repeatedly shown important clinical improvements in children receiving these types of interventions. There is, however, a dearth of knowledge about the mechanisms by which early interventions helps restoring the developmental trajectories of children with autism. In this presentation, we will

examine whether clinical improvements observed in children receiving therapeutic interventions are associated with measurable changes in the visual interest for socially relevant stimuli, and measurable changes in neural processing of biological motion and social stimuli.

Methods: In our longitudinal project, we recruit young children with ASD right after diagnosis, as well as typically developing children (TD). Children with autism receive varying degree of therapeutic interventions (i.e. treatments typically available in the community, or intensive intervention following the Early Start Denver Model), and all children are repeatedly examined at 6 months interval. We designed our own paradigms to measure different levels of complexity in social cognition, from social orienting, to simple social scenes to quantify following of joint attention, understanding of intentions and representation of other's beliefs. In addition to standardized behavioral and neurodevelopmental assessments, we also record high-density EEG during most of these eye-tracking tasks, to understand the neural basis of biological motion and social interactions processing.

Results: As of today, we have collected about 55 children (35 ASD, 20 TD) at several time points. Both eye-tracking data and cerebral activity discriminate children with ASD from TD at baseline. We use the longitudinal dataset to examine whether the amount of hours spent in an intervention program explain normalization of the cerebral activity in regions of the social brain, and whether this normalization can be explained by a change in the interest for people or the ability to look into the eyes as measured with eye-tracking.

Conclusions: Original eye-tracking paradigms and state-of-the-art EEG analyses show promise to complement clinical studies and further our understanding of the mechanisms by which early interventions helps restoring the developmental trajectories of children with autism.

4. Presenting author: Marie-Maude Geoffroy

M6-02-04

Impact of the early start Denver model (ESDM) on the development of children with autism spectrum disorder (ASD) in a European French-speaking population: a novel ecologic multicenter study design

Marie-Maude Geoffroy¹, Sabine Manificat², Sandrine Touze³, Véronique Delvenne⁴, Nicolas Georgieff⁴, Stephan Eliez⁵, Stéphane Bahrami⁶, Marie Schaefer⁵, Carmen Schroder⁷, Mario Speranza⁸

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Background: Intervention for ASD in the European French-speaking countries is often heterogeneous and poorly evaluated. Six French-speaking early intervention units for children with autism following the Early Start Denver Model (ESDM) have been created since 2011 (four in France, one in Switzerland and one in Belgium) with the common aim to prove effectiveness and cost-efficiency of the ESDM applied to the European French-speaking public health system.

Methods: In order to attain this goal, significant government and funding have been obtained for a multicenter, randomized controlled trial using an innovative study design, a modified Zelen design. After diagnostic, children with ASD, age 18–36 months, living in the proximity of one of the early intervention units, will be included in a longitudinal cohort with the consent of the parents. Sixty children will be drawn lots among 180 children of the cohort and will be included in a ESDM intervention with the consent of the parent. Two groups will be compared: an experimental group of 60 children receiving 12 h a week of ESDM intervention delivered by trained therapists during 2 years and a control group of 120 children receiving typical heterogeneous ‘as-usual’ intervention proposed by professionals and public services over the same period. Global developmental profiles of all the children will be measured at different timepoints over the 2 years through standardized tools such as the Mullen Scale of Early Learning and the Vineland Adaptive Behavior Interview for parents. Developmental quotients and Standard scores of these tests will be used as dependent measures to evaluate the main outcomes. Expected results are a greater improvement of global development and adaptive skills in the experimental group compared to the control group, due to the specificity of the ESDM and the intensity of the early intervention. The cost-efficiency of intervention in the ESDM group is also expected to be higher than in the control group. Feasibility study supports these hypotheses.

Conclusions: In conclusion, this European French-speaking study is of interest to further demonstrate the efficiency of ESDM for ASD in French-speaking public health systems. We will highlight strengths and disadvantages of the choice of this novel design in a perspective of evaluation and evolution of practice, and hopefully provide data for the political decision-making process regarding ASD interventions in European French-speaking countries.

M6-03

Early detection of bipolar disorder: from genetic risk to full-blown syndrome

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Hospital Clinic I Provincial De Barcelona, Barcelona, Spain¹;
Hospital Infantil Universitario Niño Jesús, Madrid, Spain

Symposium title: “Early detection of Bipolar Disorder: from genetic risk to full-blown syndrome”

Chair: V. Sanchez-Gistau, MD, PhD, Hospital Clinic of Barcelona, Barcelona, Spain

Symposium overview:

The study of Bipolar disorder (BD) in children and adolescents has become a focus of interest in recent years. Diagnosis of BP in children is a challenging condition since classification systems of mental disorders are focused on adult population. The study of subjects in their very early stages of the illness without the effects of long-term medication and chronicity will help us to better understand the neurobiological mechanisms underlying the development of the disorder. In addition, early detection even before the onset of specific symptoms has gained growing support in the field of schizophrenia; however, the study of the prodromal phase in BP is still at the beginning of the road. Given the heightened risk for developing BP, following-up children offspring of BP parents, might help us to recognize early precursors of later outcomes. Considering this brief introduction, the symposium proposal includes three talks.

M6-03-01

Symptom dimensions in bipolar offspring. Sex differences and developmental profiles

María Goretti Morón-Nozaleda MD^{1,2}, Covadonga M. Díaz-Caneja MD^{1,3}, Josefina Castro-Fornieles MD, PhD^{3,4}, Elena de la Serna PhD³, Vanessa Sanchez-Gistau MD, PhD^{3,4}, Soledad Romero MD, PhD^{3,4}, Immaculada Baeza MD, PhD^{3,4}, Gisela Sugranyes MD, PhD^{3,4}, Carmen Moreno MD, PhD^{1,3}, María Dolores Moreno MD, PhD^{1,3}

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Background: Current approaches to psychiatric disorders emphasize the need to use both dimensional and categorical measures. In the case of bipolar disorder (BD), the concept of an identifiable clinical precursor consisting of subsyndromal symptoms is still controversial. Offspring studies provide a unique opportunity to explore early clinical manifestations of disease as well as subthreshold psychopathology.

Methods: We recruited from the Bipolar and Schizophrenia Young Offspring Study 90 offspring (6–17 years old) (BpO) of 54 families with at least one parent with BD, and 107 offspring (CcO) of 65 community control families. Offspring diagnoses were determined using the Schedule for Affective Disorders and Schizophrenia for School-Age Children—Present and Lifetime version (K-SADS—PL). Children’s psychopathology and functioning was assessed using the Hamilton Depression Rating Scale (HDRS), Young Mania Rating Scale (YMRS), Scale of Prodromal Symptoms (SOPS), Strengths and Difficulties Questionnaire (SDQ), Children’s Global Assessment Scale (C-GAS).

Results: BpO showed higher prevalence of any Axis I disorders ($p = 0.002$), any mood disorders ($p = 0.01$), ADHD ($p = 0.01$) and worse psychosocial functioning ($p = 0.035$). The BpO scored higher in the HDRS ($p = 0.002$), total SOPS ($p = 0.007$), all SOPS subscales (Positive $p = 0.013$; Negative $p = 0.018$; Disorganized $p = 0.040$; General $p = 0.043$), SDQ Conduct ($p = 0.031$), Emotional ($p < 0.001$) and Prosocial subscales ($p = 0.014$). In the offspring with no current Axis I disorder, the BpO still presented a profile of higher scores in the depression dimension as compared with CcO ($p = 0.04$) and also higher scores in the Emotional subscale ($p = 0.014$) and lower in the Prosocial subscale ($p = 0.026$) of the SDQ. Exploring rates of psychopathology in males and females by developmental periods, we find higher rates of mood disorders in late adolescence in BpO females as compared with CcO females ($p = 0.033$). Axis I lifetime disorders are more prevalent in BpO males under 12 years old ($p = 0.026$) and early adolescence ($p = 0.014$) than in CcO males. ADHD is significantly higher in males in the BpO in the group from 12 to 15 years old than in CcO males ($p = 0.036$). In the non-psychiatrically ill offspring, boys scored higher than girls in the SOPS disorganized subscale ($p = 0.027$) and the SDQ Peers subscale ($p = 0.036$).

Conclusion: Even if the specificity of prodromal symptoms and signs of BD appears to be low and conclusive findings are still limited, it appears to be a progression from subsyndromal symptoms that gradually seem to become more prominent before they crystallized and functional impairment occur. Sex and developmental status may influence clinical presentation. Acknowledgments: Instituto de Salud Carlos III (FIS PI 07/0066, PI 11/00683), European Regional Development Fund (ERDF), Marato TV3 foundation (091630).

M6-03-02**Premorbid disorders and prodromal affective symptoms in early-onset first—episode of psychoses: differences between bipolar and schizophrenia trajectories**

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Background: Early detection before the onset of specific symptoms has gained growing interest in the field of schizophrenia (SZ); however the study of the prodromal phase in Bipolar Disorder (BD) is still at the beginning of the road. Findings from the very few studies focusing on the prodromal phase of both early-onset mania and SZ have reported a symptomatic overlap, suggesting that both sub-threshold affective and psychotic symptoms are potentially identifiable prior to the full-blown syndrome. In addition, even before the appearance of sub-threshold prodromal symptoms, premorbid neurodevelopmental abnormalities and psychopathological symptoms have been described in early-onset psychosis of both affective and non-affective types. **Aims:** Our aim was to investigate the prevalence and type of early premorbid antecedents and prodromal affective symptoms of early-onset psychosis. Whether the presence of early antecedents or affective symptoms during the prodromal phase predicts a later diagnosis of BD or SZ was also investigated. **Methods:** Participants were 95 youths, aged 9–17 years, experiencing a first episode of a psychotic disorder according to DSM-IV criteria. Early premorbid antecedents and prodromal affective symptoms in the year prior to the onset of full-blown psychosis were assessed by means of the K-SADS-PL. Given the difficulty of establishing a definitive diagnosis in the acute episode, the most accurate DSM-IV diagnosis at 12 months was taken. **Results:** 67.3 % of subjects suffered from a premorbid DSM-IV disorder, developmental disorders mainly. In addition, more than a half of subjects experienced affective symptoms during the prodrome, being depressive symptoms the most frequently reported. Neither the prevalence of premorbid antecedents nor the age of first contact with mental health differed between SZ and BD patients. However, compared with SZ, prodromal affective symptoms were associated with a later diagnosis of BD (OR 7.56; 95 % CI 2.06–27.47, $p = .002$). **Conclusions:** Our results increase the evidence supporting the existence of neurodevelopmental precursors and heterogeneous psychopathology years before the onset of both first episode of mania and SZ. Given the symptomatic overlap in both premorbid and prodromal periods, early detection programs should include not only patients at risk of SZ but also at risk of BD. **Acknowledgments:** Instituto de Salud Carlos III, ERDF, (RETICS)-G03/032, 2009SGR1119 and (S2010/BMD-2422 AGES).

M6-03-03**Structural brain alterations in adolescents with bipolar disorder**

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Background: Several studies have shown that the onset of Bipolar Disorder (BD) typically occurs during adolescence. Adolescence is also a sensitive period for the developmental of neural systems supporting fronto-limbic connectivity that have been implicated in the pathophysiology of mood disorders. Neuroimaging studies in adolescents with BD may help to better understand the neurobiological mechanism that occurs at the onset of the illness during adolescence. **Aim:** To study whole-brain grey matter volume characteristics in adolescents with bipolar disorder relative to age-matched healthy controls to identify possible structural abnormalities associated with bipolar disorder.

Methods: Participants were 33 youths, aged 12–19 years old, with BD type I or II according to DSM-IV criteria and 27 healthy controls matched by sex and age. Subjects were assessed using the KSADS-PL. High-resolution magnetic resonance structural images were acquired from a 3 T Siemens scanner located in the Hospital Clinic of Barcelona. A voxel based morphometric study was performed in order to determine grey matter volume (GMV) differences in the bipolar group as compared to the controls. Tissue volume (grey matter) measures were determined using SPM8 and whole brain VBM analyses were performed using a two-sample t test design (threshold was set at $p < 0.001$, un-corrected, with extended threshold of 20 voxels).

Results: The results indicated GMV decreases in the bipolar group as compared to the control group in frontal brain areas such as the right superior medial frontal cortex and the right orbitofrontal cortex; the left posterior cingulate cortex and in temporal regions including the lingual gyrus bilateral, and also in the left middle and superior occipital cortices. We did not observed GMV decreases in the control group in comparison to the bipolar group.

Conclusions: Our results converge with previous studies that demonstrate abnormalities in frontal and limbic structures in adolescents with bipolar disorder.

Acknowledgments: Instituto de Salud Carlos III (FIS: PI11/01224). Fondos Feder, 2009SGR1119.

M6-04**The complexity of eating disorders: insight into recent research venues in molecular genetics, neuropsychology, neuroimaging, and social sciences**

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University Of Duisburg-essen, Essen, Germany;
University of Aachen, Aachen, Germany; Inserm U669,
Kings College, London, UK

Symposium Overview

Chairs: Johannes Hebebrand (Department of Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy, University Hospital Essen, University of Duisburg-Essen, Germany; johannes.hebebrand@uni-due.de)

Beate Herpertz-Dahlmann (Department of Child and Adolescent Psychiatry and Psychotherapy, University of Aachen, Germany)

Speaker 1: Anke Hinney

Affiliation: Department of Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy, University Hospital Essen, University of Duisburg-Essen, Essen, Germany

Title: Genetic variation at three genetic loci involved in Anorexia Nervosa is associated with body weight regulation

Speaker 2: Kate Tchanturia

Affiliations: Psychological Medicine, King's College London and South London and Maudsley NHS Trust, London, UK

Title: How can understanding the neuropsychology of eating disorders guide treatment strategies?

Speaker 3: Kerstin Konrad

Affiliation: Department of Child and Adolescent Psychiatry and Psychotherapy, University of Aachen, Aachen, Germany

Title: The anorectic brain: new insights from neuroscience

Speaker 4: Bruno Falissard

Affiliation: INSERM U669, Maison de Solenn, Paris, France

Title: Eating disorders: have social sciences something to tell us?

Abstract: Eating disorders have a complex etiology, to which both genetic and environmental factors contribute. This symposium seeks to exemplarily illustrate the mechanisms involved by focusing on different research fields ranging from molecular genetics to social sciences.

Anke Hinney and coworkers have attempted to identify gene loci involved in both body weight regulation and anorexia nervosa (AN). For this purpose, the investigators carried out a look-up of the 1000 top hits of a genome wide association study (GWAS) of AN as based on an international consortium (Boraska et al., *Mol Psychiatry* 2014) in the GWAS data set of the GIANT consortium (Speliotes et al., *Nat Genet* 2010). Single loci in the GIANT data set revealed p-values <0.05 after Bonferroni correction for 1000 tests, thus providing evidence for an overlap in genes involved in AN and weight regulation including a gene in the BDNF pathway.

Kate Tchanturia discusses how research in cognitive styles and neuropsychology in eating disorders stimulated the treatment innovations (Tchanturia et al. 2014 EEDR, Tchanturia et al. 2012 Plos one, Lang et al. 2014 WJBP). Recent data collected in child and adolescent populations will be presented, the benefits of Cognitive Remediation Therapy for the patients will be summarized.

Kerstin Konrad discusses how neuroimaging findings have contributed to an improved understanding of the etiological pathways and the consequences of starvation in juvenile anorexia nervosa. Recent findings from large-scale data collections and meta-analyses on structural and functional brain abnormalities in patients with AN will be presented and future perspectives of neuroimaging for diagnoses and treatment of anorexia nervosa will be discussed.

Bruno Falissard addresses the role of social sciences in eating disorders. Transcultural epidemiology, sociology, psychoanalysis, feminist studies, all these disciplines and many others propose numerous works that bring a different light on the question of eating disorders. For most of us it is really difficult, and even often intractable, to integrate these different sources of knowledge with those considered as more "standard" in the medical field like molecular biology and neuroscience. Are they reliable, what is their level of "evidence"? Have they a potential interest for clinical practice and research?

Keywords: Anorexia nervosa, etiology.

M6-04-01

Genetic variation at three genetic loci involved in anorexia nervosa are associated with body weight regulation

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Introduction: Body weight regulation is disrupted in patients with anorexia nervosa (AN). Prior to the onset of disease body weight in patients with AN covers the whole BMI (body mass index) range. Since the genetic contribution to the etiology of AN is high, we hypothesised that some genetic variants known to be associated with body weight regulation may also be associated with AN.

Subjects and Methods: We performed a cross-trait analysis of the 1000 SNPs (single nucleotide polymorphisms) with the lowest p-values from a genome wide association study (GWAS) of AN (GCAN, Boraska et al., *Mol Psychiatry*. 2014;19:1085–94) for evidence of association in the largest published GWAS meta-analysis for BMI (GIANT; Speliotes et al., *Nat Genet*. 2010;42:937–48).

Results: We detected Bonferroni corrected significant association (p-values <5 × 10⁻⁰⁵) for 9 SNPs at 3 independent chromosomal loci (chromosomes 2, 10 and 19). None of the nearest genes to these SNPs has previously been associated with AN. Information on the function of most of these genes is sparse. One gene is biologically plausible as it is reported to be involved in the BDNF (brain derived neurotrophic factor) signaling pathway.

Discussion: Genome wide association studies did not yet reveal a genome wide significant locus for AN. A cross trait analysis for AN and BMI loci revealed SNPs in three independent chromosomal loci. In depth molecular genetic and biological analyses are warranted to unravel the relevance of these loci and the genes they contain in the etiology of AN.

M6-05

Trastornos de alimentación a lo largo de la infancia y adolescencia: continuidades y discontinuidades

Overview:

Moderadora: Mar Faya, Servicio de Psiquiatría y Psicología, Hospital Infantil Universitario Niño Jesús, Madrid, Spain

Evaluación e intervención psicológica y familiar de un programa interdisciplinar de atención al niño pre-escolar con trastorno de alimentación.

Beatriz Sanz Herrero, Servicio de Psiquiatría y Psicología, Hospital Infantil Universitario Niño Jesús, Madrid, Spain

Diversidad clínica de los trastornos de alimentación de inicio en edad escolar: utilidad de las nuevas propuestas del DSM-5.

Montserrat Graell, Angel Villaseñor, Patricia Andrés, Servicio de Psiquiatría y Psicología, Hospital Infantil Universitario Niño Jesús, Madrid, Spain

Patrones disfuncionales de interacción familiar en los trastornos del comportamiento alimentario de la adolescencia: comparación con trastorno por consumo de sustancias y controles sanos.

Dimitra Anastasiadou*, Ana Rosa Sepúlveda, Universidad de Bergamo, Bergamo, Italia. Facultad de Psicología Universidad Autónoma de Madrid, Madrid, Spain

M6-05-01**Evaluación e intervención psicológica y familiar de un programa interdisciplinar de atención al niño pre-escolar con trastorno de alimentación***Beatriz Sanz Herrero*

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Una intervención temprana en los trastornos de alimentación en los primeros años de vida es fundamental para la prevención de posibles alteraciones en el desarrollo físico, cognitivo y emocional del niño y en la construcción de un vínculo afectivo estable entre los padres y su hijo.

En este grupo de edad (0–6 años) es muy importante lograr una comprensión lo más integradora posible de todos los factores que entran en juego en la aparición del trastorno de alimentación y asimismo, es necesario discriminar entre las dificultades del niño y las propias de los padres.

Planteamos el trabajo específico en un grupo de niños de esta edad ($n = 40$) y sus familias, donde el niño es situado como sujeto frente a sus propias dificultades y una intervención con el grupo familiar para lograr que los padres recuperen su papel de protección en el cuidado de sus hijos. Presentamos la mejoría física (recuperación de curvas de peso y talla), en la conducta alimentaria (cantidad, variedad, textura y autonomía según edad) y progreso emocional y vincular de estos niños que les permitirá continuar su desarrollo biopsicosocial.

Destacamos dos aspectos fundamentales del trabajo terapéutico. Crear un espacio para escuchar cómo se sienten los padres ante las dificultades de sus hijos, analizar situaciones concretas y posibilitar una nueva forma de interacción donde puedan ejercer su propia función. Y, por otro lado, un acercamiento específico a las vivencias subjetivas del niño y a sus dificultades en otras áreas, recuperando su protagonismo y su participación activa frente a sus síntomas y de cara a su tratamiento.

M6-05-02**Diversidad clínica de los trastornos de alimentación de inicio en edad escolar: utilidad de las nuevas propuestas del DSM-5***Montserrat Graell Berna*

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Los trastornos de la conducta alimentaria de aparición en la edad escolar (6 a 13 años) presentan características clínicas muy heterogéneas. El diagnóstico específico según los criterios clínicos de las clasificaciones habituales ha sido difícil. El nuevo diagnóstico de la DSM-5 denominado Trastorno evitativo y restrictivo de la ingesta (TERI) puede facilitar el diagnóstico en este grupo de edad.

El objetivo es analizar y discutir las características clínicas en los niños entre 6 y 13 años que consultan por alteraciones alimentarias y comparar los criterios diagnósticos según las clasificaciones DSM-IV-TR y DSM-5 para estudiar la utilidad de las nuevas propuestas diagnósticas en esta población.

Presentamos un estudio clínico y diagnóstico de 250 escolares (80 % niñas y 20 % niños) entre 6–13 años atendidos durante los últimos 5 años en una Unidad de Trastornos de Alimentación. Presentamos los diagnósticos según las clasificaciones DSM-IV-TR y DSM-5.

El diagnóstico según DSM-IV-TR fue: Trastorno de alimentación de inicio en la infancia 15 (5.9 %), anorexia nervosa restrictiva (ANR) 113 (45.3 %), trastorno de conducta alimentaria no especificado (TcANE) 105 (41.9 %), anorexia nervosa purgativa (ANP) 15 (5.9 %), Bulimia nervosa (BN) 2 (0.8 %). El diagnóstico según DSM-5 fue: ANR 116 (46.3 %), ANP 15 (5.9 %), BN 2 (0.8 %), TcANE 29 (11.6 %), Trastorno evitativo restrictivo de la ingesta 86 (35.1 %).

El diagnóstico según edad muestra que el TERI presenta doble prevalencia en los menores de 12 años y la anorexia restrictiva es tres veces más frecuente en los escolares de 12 y 13 años respecto a edades inferiores.

Casi la mitad de niños escolares fueron diagnosticados de TcANE con los criterios DSM-IV-TR, sin embargo este diagnóstico se reduce a un tercio con los criterios de DSM-5. Más de dos tercios de los pacientes que fueron diagnosticados de TcANE según la DSM-IV-TR han sido diagnosticados de TERI según la DSM-5. Concluimos que el nuevo diagnóstico de trastorno evitativo restrictivo de la ingesta es útil y específico en este grupo de pacientes de edad escolar. Discutimos las implicaciones clínicas y terapéuticas de estos resultados.

M6-05-03**Patrones disfuncionales de interacción familiar en los trastornos del comportamiento alimentario de la adolescencia: comparación con trastorno por consumo de sustancias y controles sanos***Dimitra Anastasiadou*

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Los trastornos de la conducta alimentaria (TCA) y los trastornos por consumo de sustancias (TCS) comparten varios aspectos biopsicosociales en cuanto a su naturaleza, evolución, pronóstico y tratamiento, y patrones disfuncionales de interacción familiar, algo que hace que sea fundamental la implicación de la familia en el tratamiento de ambos trastornos. El objetivo del estudio es comparar la experiencia de cuidado, los niveles de Emoción Expresada (EE), la acomodación a los síntomas de la enfermedad y la calidad de vida entre familias de pacientes adolescentes diagnosticados de TCA, TCS y familias de adolescentes sanos. A través de cuestionarios se evaluó la experiencia de cuidado (ECI) de los padres, sus niveles de EE (FQ), su acomodación a los síntomas (AESED, AESSA) y su calidad de vida (SF-36). Los diagnósticos de los/as pacientes se obtuvieron a través de entrevista clínica (K-SADS). 93 madres y padres de 48 pacientes diagnosticados/as de TCA y 84 madres y padres de 47 pacientes diagnosticados/as de TCS fueron reclutados de la Unidad de TCA del Hospital Universitario Niño Jesús y del Programa Soport-Proyecto Hombre, respectivamente. 116 madres y padres de 68 adolescentes sanos fueron reclutados de dos Institutos Públicos de Educación Secundaria de la Comunidad de Madrid. Los/las adolescentes de tres grupos tenían edades entre 12 y 21 años.

Las madres del grupo TCS mostraron niveles más altos de EE y de carga del cuidador en comparación con los padres del mismo grupo y en comparación con los otros grupos de familias. Sin embargo, las madres del grupo TCA mostraron peor calidad de vida (sobre todo el componente de Salud Mental) comparadas con los padres del mismo grupo y con las familias en TCS y con las familias de adolescentes sanos.

Identificar los factores compartidos o diferenciadores en el funcionamiento familiar, la experiencia de cuidado y el estado de salud de las familias de ambos grupos de pacientes, nos permite diseñar programas de intervención específicos dirigidos a mejorar su estado de salud y enseñarles habilidades de comunicación y de resolución de problemas.

M6-06**Influences of dopamine and serotonin gene variants and their interplay with the environment in attention-deficit/hyperactivity disorder**

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Chair: Mrs. Jennifer S. Richards

Co-chair: Prof. Jan K. Buitelaar

M6-06-01**Dopamine and serotonin genetic risk scores predicting substance and nicotine use in attention-deficit/hyperactivity disorder**

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Keywords: ADHD, Adolescence, Genetic risk scores, Nicotine use, Substance use.

Background: Individuals with attention-deficit/hyperactivity disorder (ADHD) are at increased risk of developing substance use disorders (SUDs) and nicotine dependence. The co-occurrence of ADHD and SUDs/nicotine dependence may in part be mediated by shared genetic liability. Genetic liability for complex disorders such as ADHD and SUDs/nicotine dependence is thought to be multifactorial, with contributions of multiple risk variants, each with a small effect size. In comparison to analyzing single polymorphisms, analysis of genetic risk scores may capture a greater proportion of the genetic contribution to complex disorders. Several neurobiological pathways have been

implicated in both ADHD and SUDs, including dopamine and serotonin pathways. We hypothesized that variations in dopamine and serotonin neurotransmission genes were involved in the genetic liability to develop SUDs/nicotine dependence in ADHD. Methods: The current study included participants with ADHD ($n = 280$) who were originally part of the Dutch International Multicenter ADHD Genetics study. Participants were aged 5–15 years and attending outpatient clinics at enrollment in the study. Diagnoses of ADHD, SUDs, nicotine dependence, age of first nicotine and substance use, and alcohol use severity were based on semi-structured interviews and questionnaires. Genetic risk scores were created for both serotonergic and dopaminergic risk genes previously shown to be associated with ADHD and SUDs and/or nicotine dependence. Results: The serotonin genetic risk score significantly predicted alcohol use severity in adolescents with ADHD. No significant serotonin \times dopamine risk score or effect of stimulant medication was found. Conclusions: The current study adds to literature by providing insight into genetic underpinnings of the comorbidity of ADHD and SUDs. While the focus of the literature so far has been mostly on dopamine, our study suggests that serotonin also plays a role in the relationship between these disorders.

M6-06-02**Dopamine and serotonin gene variants influence the neural correlates of response inhibition in adolescents with ADHD and healthy controls**

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Keywords: Response inhibition, ADHD, Dopamine, Serotonin, fMRI.

Background: Impairment of response inhibition has been implicated in attention-deficit/hyperactivity disorder (ADHD). Dopamine neurotransmission has been linked to the behavioral and neural correlates of response inhibition. The current study aimed to investigate the relationship of polymorphisms in the DAT1 and COMT dopamine-related genes with the neural and behavioral correlates of response inhibition. **Method:** Behavioral and neural measures of response inhibition were obtained in 185 adolescents with ADHD, 111 of their unaffected siblings, and 124 healthy controls (mean age 16.9). We investigated the association of DAT1 and COMT variants from the dopamine system, as well as HTR1B and HTTLPR variants from the serotonin system on task performance and whole-brain neural activation during response inhibition in an hypothesis-free manner.

Results: The whole-brain analyses demonstrated large scale neural activation changes in the medial and lateral prefrontal, subcortical, and parietal regions of the response inhibition network in relation to the investigated polymorphisms. Although these neural activation changes were associated with different task performance measures, no relationship was found between DAT1 and COMT variants or HTR1B and HTTLPR variants and ADHD, nor did variance in these genes explain variance in the effects of ADHD on the neural activation.

Conclusions: These results suggest that both dopamine- and serotonin related genes play a role in the neurobiology of response inhibition. The limited associations between gene polymorphisms and task performance further indicate the added value of neural measures in linking genetic factors and behavioral measures. Although response inhibition is strongly linked to ADHD, genetic variants associated with response inhibition and its neural correlates do not explain variance of the ADHD phenotype.

M6-06-03

Brain correlates of the interaction between 5-HTTLPR and psychosocial stress mediating attention-deficit/hyperactivity disorder severity

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Keywords: Gene-environment interaction, Serotonin transporter, Psychosocial stress, Attention-deficit/hyperactivity disorder, Grey matter volume.

Background: Numerous papers have reported that serotonin transporter 5-HTTLPR genotype moderates the effect of stress on depression and anxiety. We recently found that this gene-environment interaction is also associated with severity of attention-deficit/hyperactivity disorder (ADHD); we found stronger effects of stress in carriers of the short allele than in individuals homozygous for the long allele, independent of comorbid internalizing problems. The underlying neurobiological mechanism of this gene-environment interaction in ADHD is unknown. This study aimed to determine whether 5-HTTLPR moderates the effect of stress on brain grey matter volume and, if so, which brain regions mediate the effect of this gene-environment interaction on ADHD severity.

Method: Structural magnetic resonance imaging, 5-HTTLPR genotype, and stress exposure questionnaire data were available for 701

adolescents and young adults participating in the multicenter ADHD cohort study NeuroIMAGE (from 385 families; 291 with ADHD, 78 with subthreshold ADHD, 332 healthy controls; 55.8 % males; average age 17.0 years). ADHD symptom count was determined through multi-informant questionnaires. For the analysis, we combined a whole-brain voxel-based morphometry approach with mediation analysis.

Results: Stress exposure was associated with significantly less grey matter volume in the precentral gyrus, middle and superior frontal gyrus, frontal pole, and cingulate gyrus for S-allele carriers than for participants homozygous for the L-allele. The association of this gene-environment interaction with ADHD symptom count was mediated by grey matter volume in the frontal pole and anterior cingulate gyrus.

Conclusions: These results indicate that the gene-environment interaction plays a broader role in shaping behavior than previously assumed based on its association with internalizing problems, as 5-HTTLPR genotype moderates the effect of stress on brain regions involved in social cognitive processing and cognitive control. Specifically regions important for cognitive control link this gene-environment interaction to ADHD severity.

M6-06-04

Developmentally sensitive gene-environment interactions and the putamen volume: is there room for differential susceptibility?

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Keywords: ADHD, Brain volume, Gene-environment interaction, Social environment, sMRI.

Background: Brain volume reductions have been linked to psychopathology such as schizophrenia, depression and attention-deficit/hyperactivity disorder (ADHD). Identify mechanisms underlying these alterations, therefore, is of great importance. Both genetic and environmental factors play a crucial role in determining an individual's variability in brain architecture. We investigated gene-environment interactions (GxE) on adolescent brain volumes from the differential susceptibility perspective. This theory states that individuals carrying so called plasticity genes are more disadvantaged in negative environments, while more advantaged in positive environments.

Methods: Whole brain volume (gray matter) and subcortical volumes (caudate nucleus and putamen) were derived from structural magnetic resonance imaging (MRI) scans using automated tissue segmenting in

participants with and without Attention-Deficit/Hyperactivity Disorder (ADHD; $N = 312$ and $N = 437$ respectively, from $N = 402$ families; age $M = 17.00$, $SD = 3.60$). We examined interactions between variants in candidate plasticity genes (DAT1, 5-HTT, DRD4) and social environments (maternal expressed warmth and criticism; positive and deviant peer affiliation).

Results: A significant 3-way interaction was found between DAT1, criticism and age on total putamen volume. Younger participants with two 10-repeats had a larger putamen volume when exposed to more maternal criticism, while older participants had a smaller putamen volume when exposed to more criticism. DAT1 9-repeat carriers showed no developmental differences. A similar 3-way interaction was found between DRD4, positive peer affiliation and age on the right putamen volume. Here, 7-repeat carriers showed age dependent associations between positive peer affiliation and right putamen volume, i.e., a negative association when younger, but positive when older. Results were independent of ADHD severity.

Conclusions: Our results indicate the importance of developmentally sensitive GxE effects on the putamen volume. The finding that only carriers of specific genotypes were susceptible to environmental influences is in line with the differential susceptibility theory. Further support for this theory, however, was absent as different genes were associated with either positive or negative environments instead of the same candidate plasticity gene with both environments.

M6-07-01 Sleep problems, mental health problems and lifestyle among young Norwegian adolescents

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Abstract:

Objective: Sleep problems and mental health problems are common among children and adolescents, and are often found to be associated. More knowledge of how they are related and the influence of lifestyle factors is needed. The purpose of the present study was to investigate the associations between sleep problems and mental health and the influence of lifestyle factors in a sample of young Norwegian adolescents.

Methods: Children aged 12–13 years were recruited from the seventh grade of primary schools in Telemark County, Norway. Parents reported on their child's sleep problems by answering questions about disturbed sleep and daytime sleepiness. The child's mental health was assessed by parents completing the extended version of the Strength and Difficulties Questionnaire (SDQ). Parents also answered questions about the child's physical activity, screen use, eating pattern, and the parents' own educational level and family income. The height and weight of the children were objectively measured. Complete data were obtained for 690 children.

Results: Multiple logistic regression analysis showed that children with disturbed sleep were more likely to have indications of psychiatric disorders (OR 4.2, CI 2.2–8.0) than children without disturbed sleep. Analyzing sub-groups of symptoms we found significant associations between disturbed sleep and emotional disorders (OR 12.6, CI 4.4–36.5), and between disturbed sleep and hyperactivity disorders (OR 4.3, CI 2.0–9.5). Children who seemed tired during the day were also found more likely to have indications of psychiatric disorders (OR 2.7, CI 1.5–4.7) than children without

daytime sleepiness. Analyzing sub-groups of symptoms we found significant associations between daytime sleepiness and emotional disorders (OR 3.1, CI 1.1–8.9), and between daytime sleepiness and hyperactivity disorders (OR 3.0, CI 1.5–6.0). Disturbed sleep at night and daytime sleepiness cover different aspects of sleep quality, and may overlap. All reported ORs are adjusted for the other sleep aspect in addition to any significant associated background variables among physical activity, screen use, eating pattern, overweight, parental educational level and family income. The results therefore indicate that both aspects of sleep quality are associated with mental health problems independently of each other and important background variables.

Conclusion: The results support the hypothesis that sleep problems may be an important underlying factor for mental health problems in children.

M6-07-02 Sexual activity and mental health in middle adolescence

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Depression, conduct disorder, smoking and alcohol use as predictors of sexual activity in middle adolescence: a longitudinal study.

First intercourse is often characterized as sexual debut, and, when occurring during adolescent development, is seen both as normative development and as a form of problem behavior. The aim of the present study was to explore associations between emotional and behavioural symptoms and later engagement in sexual behaviours in middle adolescence.

All ninth graders in two Finnish cities were recruited to response to a questionnaire focusing on mental health and disorders, health behaviors and risk and protective factors (T1), and a follow-up survey 2 years later (T2). The baseline sample (94.4 % of all eligible) comprised 1,609 girls and 1,669 boys, with mean age 15.5 years ($SD 0.39$). A total of 2070 adolescents completed the survey at both T1 and T2. The response rate of the final sample was 63.1 % (2070/3278). Of the respondents, 56.6 % were girls. Experience of intercourse and number of partners for intercourse were elicited at age 17. Depression was measured with the 13-item Beck Depression Inventory, conduct disorder with the Youth Self-Report, and smoking and alcohol consumption with questions widely used in Finnish adolescent health surveys. The data were analysed using cross-tabulation with Chi square statistics for classified variables and t-test for continuous variables. Logistic regression was used to study multivariate associations.

Depression, conduct disorder, smoking and drinking at age 15 were associated with having experienced intercourse by age 17 (Odds ratios (OR) 1.8–10.3) and with multiple partners for intercourse by age 17 (OR:s 2.4–4.7) among girls. In boys, frequent alcohol use and smoking at age 15 (OR:s 2.2 and 4.6) were associated with experience of intercourse by age 17, and these and conduct disorder at age 15 with multiple partners for intercourse by age 17 (OR:s 2.8–3.2).

Emotional and behavioural disorders in middle adolescence are associated with sexual activity and risk-taking sexual behaviours later in the developmental phase.

Keywords: Sexual behavior, Coitarche, Depression, Conduct disorder, Substance use, Adolescence.

M6-07-03**A roadmap for mental health research in Europe**

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Abstract

Mental disorders place immense burdens on individuals, their families and society. Their cost has been estimated at €461 billion per year in Europe. Mental health research can help to resolve these burdens, but the funding for mental health research in Europe is much lower than the population impact of these disorders with spending being less than half the disability burden. Moreover, there is limited coordination of approaches to mental disorder and mental health services research across Europe.

The ROAMER (ROAdmap for MEntal health and Well-being Research in Europe) project, funded under the European Commission Seventh Framework Programme (FP7), has developed a comprehensive and integrated mental health research roadmap, focused on improving the mental health of the population and increasing European competitiveness. ROAMER analysed existing complementary resources among European regions, covering all major domains within mental health research (i.e. infra-structures and capacity building, biomedicine, clinical research, psychological research and interventions, social and economic issues, public health and well-being), and involved input from over 1000 individuals and stakeholder organisations among researchers, users, family members, carers, clinicians and other health care service professionals, policy-makers, research funders and industry. Evidence-based recommendations were prioritised through iterative feedback, consensus meetings, international advisory boards and surveys of researchers, experts and wider stakeholders in Europe. ROAMER has covered.

Six prioritised questions were produced: these are targeted, actionable, built on excellent European science and resolvable in the next 5–10 years. The answers to these proposed research questions will improve the mental health of European citizens and tackle societal challenges.

The six research priorities for policy action in mental health and well-being research are:

1. Research into mental disorder prevention, mental health promotion and interventions in children, adolescents and young people
2. Focus on the development and causal mechanisms of mental health symptoms, syndromes and well-being across the lifespan (including older populations)
3. Developing and maintaining international and interdisciplinary research networks and shared databases
4. Developing and implementing better interventions using new scientific and technological advances
5. Empowering service users and carers in decisions about mental health care, including stakeholders in research, and reducing stigma
6. Health and social systems research that addresses quality of care and takes account of socio-cultural and socio-economic contexts and approaches

M7-01**Eating and feeding disorders in childhood and adolescence: epidemiology and outcomes**

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Chair Dr Nadia Micali

Presenters:

Dr Anja Hilbert 'Avoidant restrictive intake food disorders: a population-based study'

Dr Nadia Micali 'Adolescent eating disorders predict psychiatric, high-risk behaviors and weight outcomes in young adulthood'

Prof. Beate Herpertz-Dahlmann 'Eating disorder symptoms do not just disappear: implications of adolescent eating-disordered behaviour for body weight and mental health in young adulthood'

Dr Helen Bould 'Influence of school on whether girls develop eating disorders: a multilevel record-linkage study'

Despite being common, there is still a paucity of research on feeding and eating disorders, their presentation and course in the community. Europe has a strong tradition in high quality population-based research and this symposium will leverage on this strength.

This symposium will focus on updating participants on new findings relating to the epidemiology of feeding and eating disorders, and their outcomes. It will be based on well-defined European large population-based samples.

It will bring together presenters from 2 countries (UK and Germany) and incorporate research from Germany, Switzerland, the UK and Sweden.

The proposed talks will focus on 4 areas related to the overall symposium topic. The first talk will cover the epidemiology of feeding and eating disorders; participants will have the opportunity to be updated on the new diagnoses introduced by DSM5 and their epidemiology in childhood and adolescence.

The second and third on two studies (one from the UK one from Germany) on the adverse psychological and weight outcomes of adolescent eating disorders and disordered eating will be presented. Both independent studies show the serious long-term impact of eating disorders and disordered eating on psychopathology, alcohol and substance use, and weight outcomes.

The fourth talk will show findings relating to the clustering of eating disorders in schools in a Swedish adolescent cohort, with an epidemiological and risk factor perspective.

This symposium will be unique in bringing together novel high quality research on feeding and eating disorders across Europe. It will be aimed at clinicians and researchers across all areas of child and adolescent mental health and eating disorder specialists.

M7-01-01**Avoidant restrictive intake food disorders: a population-based study**

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The DSM-5 included the new eating disorder diagnosis Avoidant/Restrictive Food Intake Disorder (ARFID) in order to capture avoidant or restrictive eating disturbances without shape or weight concern especially in children. However, the presentation and nosology of ARFID remains largely unclear. This study sought to determine the distribution of early-onset avoidant/restrictive eating disturbances in middle childhood, as well as to evaluate the screening instrument, Eating Disturbances in Youth-Questionnaire (EDY-Q).

A total of 1444 8- to 13-year-old children were screened in schools in Switzerland using the EDY-Q, consisting of 12 items based on the DSM-5 criteria for ARFID.

Forty-six children (3.2 %) reported symptoms of ARFID on the EDY-Q. They were more frequently underweight than normal- or overweight and were of young age. Among the children with symptoms of ARFID, 39.1 % indicated a lack of interest in eating or food, 60.9 % indicated a limited food intake due to the sensory properties of the food, and 15.2 % indicated a food avoidance for based on a specific underlying fear. The EDY-Q revealed good psychometric properties, including adequate discriminant and convergent validity, measured through associations with the Eating Disorder Examination-Questionnaire adapted for children. The postulated factor structure of the EDY-Q was confirmed. Item characteristics were favorable, and internal consistency was acceptable.

Early-onset avoidant/restrictive eating disturbances are commonly reported in middle childhood, with presentation in distinctive variants. Because of possible negative short- and long-term impact, early identification is essential. The EDY-Q revealed promising psychometric properties. Further evidence from expert interviews is needed to confirm this study's findings.

M7-01-02

Adolescent eating disorders predict psychiatric, high-risk behaviors and weight outcomes in young adulthood

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Background: Eating disorders (ED) are associated with a range of physical and psychiatric comorbidities. Few studies have used population-based longitudinal data to investigate whether adolescent ED predict adverse psychiatric, behavioural, and weight outcomes. We aimed to investigate whether DSM5 ED: anorexia nervosa (AN), bulimia nervosa (BN), binge eating disorder (BED), and other specified feeding and eating disorders (OSFED), including purging disorder (PD), sub-threshold BN and BED at ages 14 and 16 are prospectively associated with depression, anxiety disorders, alcohol and substance use, and self-harm in the UK-based Avon Longitudinal Study of Parents and Children. We also aimed to compare the effect of OSFED on adverse outcomes using two frequency ED behavior thresholds (monthly and <monthly).

Methods: ED were ascertained at 14 (n = 6140) and 16 years of age (n = 5202), all outcomes were measured about 2 years later. Generalized estimating equation models adjusting for gender, socio-demographic variables and occurrence of the outcome at previous waves estimated the odds of each outcome in those with and without ED.

Results: Approximately 5 and 8.9 % of the sample had an ED respectively at ages 14 and 16 years. In models adjusted for gender, socio-demographic variables and presence of the outcome at previous

waves all ED were prospectively associated with anxiety disorders. AN, BN, BED, PD and OSFED-other were prospectively associated with depression. BN, BED and PD as well as sub-threshold BN and BED and OSFED-other predicted drug use and deliberate self-harm. Whilst BED and BN predicted obesity (respectively, OR 3.58 (95 % CI 1.06–12.14) and OR 6.42 (1.69–24.30)), AN was prospectively associated with underweight (OR 2.43 (1.62–3.66)).

Conclusions: Adolescent ED are prospectively associated with mental health disorders, substance use, and deliberate self-harm, as well as adverse weight outcomes. All DSM5 ED diagnoses were predictive of negative outcomes. This study highlights the high public health impact of ED adolescent presentations, including both typical and OSFED types, given their overall high prevalence and long-term effects.

M7-01-03

Eating disorder symptoms do not just disappear: implications of adolescent eating-disordered behaviour for body weight and mental health in young adulthood

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In a German population-based sample (the BELLA-study) we investigated the outcomes of adolescent eating-disordered behaviour on the development of body mass index (BMI) and psychological well-being in young adulthood. At baseline and 6-year follow-up, BMI, eating disorder symptoms (SCOFF questionnaire), and symptoms of depression and anxiety were assessed in the same cohort of 771 participants (n = 420 females, n = 351 males). The age range at baseline was 11–17 years and the age range at follow-up was 17–23 years. High Scores for eating disordered behavior in adolescence strongly predicted eating-disordered behavior in young adulthood. In addition, eating disordered behavior in adolescence was significantly associated with developing overweight or obesity as well as with the emergence of depressive symptoms, even after controlling for baseline SES, probands' and parental BMI and depressive symptoms. Vice versa, depressive symptoms during adolescence showed a significant relationship with extreme underweight in young adulthood. This large epidemiological study demonstrated a high stability of disordered eating behavior from adolescence to young adulthood and a significant association with overweight/obesity and depression. There is an urgent need for early detection and intervention targeting disordered eating behavior in childhood and adolescence.

M7-01-04

Influence of school on whether girls develop eating disorders: a multilevel record-linkage study

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Background: Clinical anecdote suggests rates of eating disorders (ED) vary between schools, but we are not aware of previous research into this. We investigated whether rates of ED vary between schools, and tested the hypothesis that school environment is associated with ED, after accounting for individual student characteristics.

Methods: We used longitudinal, register-based, record-linkage data for 55,059 Swedish-born females living in Stockholm County, Sweden, born in 1983 onwards, who finished school in 2001–2010. The outcome was first diagnosis of an ICD-10 or DSM-IV ED aged 16–20 years made by a specialist clinician, or inferred from an appointment at a specialist ED clinic.

Results: Incidence of ED was 2.4 % and varied between schools from 1.3 to 16.7 %. After taking individual risk factors into account, schools with more girls, and schools with more parents with post-18 education had increased odds of ED (OR 1.07 (1.01–1.13), $p = 0.018$ for each 10 % increase in proportion of girls, and OR 1.14 (95 % CI 1.09–1.19 %), $p < 0.0001$ for each 10 % increase in proportion of parents with post-18 education). The predicted probability of an average girl developing an ED is 2.1 % in a school with 50 % girls where 50 % of the parents have post-18 education, and 5.1 % in a school with 100 % girls where 100 % of parents have post-18 education.

Conclusion: Rates of ED vary between schools and this is not explained by individual student characteristics. Girls at schools with high proportions of female students, or students with highly educated parents, have higher odds of ED. This evidence supports targeting ED prevention programmes at schools with specific characteristics.

M7-02

Early intervention for emerging borderline personality disorder in adolescence

M. Kaess, P. Luyten, R. Steil, C. Hessels

University of Heidelberg, Heidelberg, Germany; University of Leuven, Leuven, Belgium; Goethe University Frankfurt, Frankfurt, Germany; Expertise Centre For Personality Disorders

Chair: Associate Professor Michael Kaess, Section for Disorders of Personality Development, Department of Child and Adolescent Psychiatry, University of Heidelberg, Heidelberg, Germany

Co-Chair: Professor Peter Fonagy, Research Department of Clinical, Educational and Health Psychology, University College London, UK

Despite longstanding general agreement that personality disorders have their roots in childhood and adolescence, diagnosing borderline personality disorder (BPD) prior to age 18 years has been controversial. To date, there is increasing evidence in support of both diagnosing and treating BPD in adolescence. Thus, national treatment guidelines, Section 3 of the new DSM-5, and the proposed ICD-11 personality disorder classification have all recently confirmed the legitimacy of the BPD diagnosis in adolescents.

There are evidence-based and effective interventions for BPD in adulthood. Given these recent developments, adolescence can now be considered a critical period for early intervention of emerging BPD,

and the field of child and adolescent psychiatry is in need to develop effective interventions that are specifically tailored to the developmental period of adolescence. This symposium will present current advances in the development and research on early intervention of adolescent BPD.

M7-02-01

Early intervention for adolescent borderline personality disorder: rationale and basic principles

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Keywords: Borderline personality disorder, Early intervention.

Borderline personality disorder (BPD) is a common and severe mental disorder that is associated with severe functional impairment and a high suicide rate. BPD is usually associated with other psychiatric and personality disorders, high burden on families and carers, continuing resource utilization, and high treatment costs.

In many settings around Europe, clinicians are still hesitant to diagnose BPD in adolescents, mainly because of four concerns: First, the diagnosis of BPD is not valid in adolescence. Second, typical features of BPD (e.g., affective instability or disturbed self-image) are normative among adolescents. Third, personality development is still in flux, and this precludes diagnosis. Fourth, clinicians wish to protect their patients from stigma associated with BPD.

However, research over the past decade has disproven the first three assumptions, and greater knowledge of this has potential to influence the fourth. Thus, this presentation aims to give an overview of the empirical data that provide the rationale for early detection and consequent intervention in adolescent BPD. In addition, basic principles and strategies of early intervention in this patient group are discussed.

M7-02-02

The development and evaluation of a spectrum of mentalization-based interventions for adolescents

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Keywords: Borderline personality disorder, Adolescents, Mentalization-based treatment.

Mentalization-based Treatment (MBT) is an evidence-based treatment for adults suffering from borderline personality disorder. This presentation presents a number of adaptations of MBT for adolescents with personality pathology. These include inpatient and outpatient MBT-A for adolescents with severe personality disorder pathology, as well as MBT-HYPE, an outreaching form of MBT, which is based on Chanen's

treatment model of borderline personality pathology in adolescence in combination with MBT principles and features. We also discuss the development of Dynamic Interpersonal Therapy (DIT) for adolescents with less severe personality pathology as part of the MBT spectrum in the treatment of adolescents. The different features of these mentalization-based treatments for adolescents are discussed, and pilot and trial data are presented when available. Specific issues that will be discussed include the role of assessment and diagnosis, suitability, self-harm and the role of the family and the broader social system, a factor that may have received insufficient attention in the past and which has led us to reconsider the role of MBT in the treatment of adolescents presenting with personality pathology and/or self-harm.

M7-02-03

Developmentally adapted cognitive processing therapy—a treatment for adolescent patients with PTSD after childhood abuse

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Keywords: PTSD, Childhood abuse, Adolescents.

Although childhood sexual abuse and childhood physical abuse (CSA and CPA) have severe psychopathological consequences, there is little evidence supporting psychotherapeutic interventions for adolescents who have experienced CSA or CPA. To provide a treatment tailored to the specific needs of adolescents suffering from abuse-related posttraumatic stress disorder (PTSD), we modified Cognitive Processing Therapy (CPT) by adding new treatment modules and changing the therapy setting. To evaluate the feasibility and efficacy of Developmentally Adapted CPT (D-CPT), we treated 12 adolescents suffering from PTSD secondary to CSA or CPA. Patients were assessed prior to treatment (t0), post-treatment (t1), and 6 weeks after treatment (t2). Assessments included the Clinician-Administered PTSD Scale (CAPS), the UCLA PTSD Index (UCLA), the Children's Depression Inventory (CDI), the Adolescent Dissociative Experiences Scale (A-DES), and the Borderline Symptom List (BSL-23). MANOVAs revealed that posttraumatic stress measurements and associated symptom measurements significantly differed across time points. When comparing t0 with t2, Cohen's *d* was large with respect to the CAPS scores ($d = 1.45$, $p < 0.001$) and the UCLA scores ($d = 1.91$, $p < 0.001$). Cohen's *d* had a medium magnitude with respect to the CDI scores ($d = 0.78$, $p < 0.001$), the A-DES scores ($d = 0.64$, $p < 0.05$), and the BSL-23 scores ($d = 0.74$, $p < 0.01$). D-CPT has the potential to reduce PTSD symptoms and comorbid psychopathology in adolescents with histories of CSA or CPA. Evaluation of first cases newly trained therapists had treated indicates that D-CPT is easy to disseminate.

M7-02-04

Implementing an Australian early intervention program for BPD in Europe: cultural and language differences, do's and don'ts

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Keywords: BPD, Early intervention, Adolescents.

The Helping Young People Early (HYPE) program developed in Melbourne, Australia (Chanen et al., 2009) provides detection and early intervention for Borderline Personality Disorders (BPD) in youth (15–24 year-olds). HYPE is an integrated, outpatient based intervention model comprising assertive case management, general psychiatric care and time-limited psychotherapy using Cognitive Analytic Therapy (CAT; Ryle and Kerr, 2002). The focus is intervention, early in the course of the disorder within a program tailored for adolescents and young adults. Specific aims of treatment are to increase adaptive functioning (including effective help-seeking) and to reduce psychopathology. A quasi-experimental comparison showed HYPE + CAT was more effective than treatment as usual (Chanen et al., 2009). A randomized controlled trial comparing CAT and Good Clinical Care (GCC), both within the HYPE program, showed that both CAT and GCC were effective in reducing externalizing psychopathology in adolescents with sub-syndromal or full-syndrome BPD, with the patients within the HYPE-CAT group showing evidence of more rapid onset of benefits (Chanen et al., 2008).

In 2012, the Centre for Adolescent Psychiatry in the Netherlands began the implementation process of a HYPE program alongside longer-term programs for youth with BPD. During this process, the team was trained and supervised by the staff of the Australian HYPE program. In this 2 years process of the implementation within the Dutch treatment facilities, guidelines and culture, different cultural differences had to be overcome. The experiences of the implementation process and the first research findings will be presented. Based on these experiences, we can understate the importance of fine-tuning an evidence-based treatment to the patients, the context, organization and culture, within patients are treated.

M7-03

Early-onset psychosis, what have we learned from a 5-year follow-up study?

Abstract type: Symposia type B

Thematic area: Clinical Disorders: Other

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Symposium title: Early-onset psychosis, what have we learned from a 5-year follow-up study?

Chair: Dr. Inmaculada Baeza, MD, PhD, Child and adolescent Psychiatry and Psychology Department, Hospital Clínic de Barcelona, CIBERSAM, IDIBAPS, Spain.

Symposium overview:

Early onset psychoses are those cases beginning before 18 years of age and generally have a poor outcome. Some variables such as premorbid functioning, duration of untreated psychosis, baseline cognitive performance and baseline gray matter volume have been associated with clinical and functional outcome at one or two-years of follow-up (Parellada et al., 2014; Arango et al., 2012). Longer-term follow-up studies are scarce in this population. However, recently one 8-year follow-up study reported that patients with poor impulse control at baseline had a worse functional outcome, suggesting that negative and positive symptoms may have differential prognostic value in early-onset psychosis (Remberk et al., 2014). We undertook a 5-year follow-up study in two Child and Adolescent Psychiatry and

Psychology units of general hospitals in Spain. Clinical, neuropsychological and neuroimaging data were assessed at baseline, and at 2 and 5 years after the first episode of psychosis. A review of the current literature as well as the findings of this study will be explained in the symposium.

M7-03-01

Clinical and functional outcome 5 years after a first episode of early-onset psychosis

Speaker: Dr. Inmaculada Baeza, MD, PhD, Child and Adolescent Psychiatry and Psychology Department, Hospital Clínic de Barcelona, CIBERSAM, IDIBAPS, Spain.

In this talk, we will review current studies of psychopathology and diagnoses in long-term follow-ups of psychotic disorders with childhood and adolescent onset. We will also explain the hypothesis, objectives, methods and results of our own study. This study involved 37 patients with a first-episode of psychosis before 18 years of age (FEP) who had undergone assessments at baseline, 2 years, and at 5-year follow-up. Their results were compared to those of 39 healthy controls who underwent the same assessments. Preliminary results of the study are as follows: Patients' mean age at baseline was 15.8 ± 1.7 years, 67.6 % were male, with no differences compared to controls. Only years of education was different between patients (6.8 ± 3.8) and controls (9.4 ± 2.4 years) ($t = 3.585$, $p = 0.001$). 59.5 % of patients were diagnosed with a schizophrenia spectrum disorder, 35 % an affective disorder, and only 5.4 % were still diagnosed with psychosis not otherwise specified at 5-year assessment. Most patients ($N = 23$, 63.1 %) were on antipsychotics, and 5 (22 %) of them on clozapine. Globally, patients improved on all of the clinical and functional scales administered from baseline to 2 and 5 years, using ANOVA for repeated measures (for total PANSS, $F = 80.12$, $p < 0.001$; for C-GAS, $F = 19.61$, $p < 0.001$). Baseline and 2-year scores on PANSS-negative subscale were associated with functional outcome measured with the GAF scale at 5-year assessment ($R = 0.325$, $p = 0.021$ and $R = 0.274$, $p = 0.032$, respectively). Conclusions: Baseline negative symptoms could have an important role in predicting functional outcome 5 years after the FEP, which is consistent with previous studies that have examined early-onset FEP samples after 2 (Hassan and Taha, 2011) and 4 years (Vyas et al., 2007) of follow-up.

M7-03-02

Are cognitive functions deteriorating during the first 5 years after a first episode of early-onset psychosis?

Speaker: Dr. Elena de la Serna, PhD, CIBERSAM Child and Adolescent Psychiatry and Psychology Department, Hospital Clínic de Barcelona, Spain.

In this talk, we will review current studies of neuropsychology in long-term follow-ups of early-onset psychotic disorders. We will also explain the hypothesis, objectives, methods and results of our own study. The preliminary data, with the same sample described in the First talk, are as follows: Differences were observed between patients and controls in all of the assessments of executive functions (EF) (at baseline $t = 3.616$, $p = 0.001$, at 2 years $t = 4.088$, $p < 0.001$ and at 5-year assessment $t = 5.230$, $p < 0.001$). When comparing the different assessments, there was a significant change in EF between the baseline exploration and at 5-year follow-up ($t = 2.324$, $p = 0.03$), which was also seen in controls ($t = 8.836$, $p < 0.001$), with a significant longitudinal change in this cognitive area between patients and controls ($F = 4.309$, $p = 0.044$). Patients diagnosed at 5-year

follow-up with schizophrenia spectrum disorders ($N = 22$, 59.5 %) showed differences in EF compared to patients diagnosed with affective psychosis ($N = 13$, 35.1 %) ($t = 10.3$, $p = 0.003$). Conclusions: Cognition is a central feature in early-onset schizophrenia (Frangou, 2013) and, specifically, executive functions which are impaired at baseline and 2-years (Bombin et al., 2013) as well as at 5-year assessment could play a key role in FEP and its evolution.

M7-03-03

Evolution of brain grey matter volumes during the 5-years following a first-episode of early onset psychosis

Speaker: Dr. Covadonga M. Díaz-Caneja, MD, Child and Adolescent Psychiatry Department, Hospital General Universitario Gregorio Marañón, IiSGM, CIBERSAM, School of Medicine, Universidad Complutense, Madrid, Spain.

In this talk, we will review current studies of neuroimaging in long-term follow-ups of early-onset psychotic disorders. We will also explain the hypothesis, objectives, methods and results of our own study. Preliminary results are: 36 patients (age at baseline 15.8 ± 1.7 , 66.6 % male) and 34 healthy controls (15.4 ± 1.4 , 55.9 % male) completed the neuroimaging assessments at baseline, at 2-years and at 5-year follow-up. No differences were found in right and left frontal gray matter (GM) volume between patients and controls at 5-year assessment ($t = 0.453$, $p = 0.652$ for right and $t = 0.612$, $p = 0.543$ for left volume). Both patients and controls showed frontal GM loss during the first 5 years of follow-up. During the first 2 years, patients presented significantly greater GM loss than controls in the left ($F = 9.642$, $p = 0.003$) and right frontal lobe ($F = 7.585$, $p = 0.008$), with no significant differences between years 2 and 5 ($F = 1.494$, $p = 0.210$ for right, and $F = 1.605$, $p = 0.226$ for left frontal lobe) or within the total follow-up ($F = 1-175$, $p = 0.282$ for right and $F = 1.431$, $p = 0.223$ for left frontal lobe). Conclusions: Over the first 2 years after the disease onset, patients with early onset psychosis show greater frontal GM loss than expected, with no significant differences afterwards. The first 2 years of the illness could be a critical period in the evolution of early onset psychosis patients.

M7-04

Important factors in ADHD management across the lifespan

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1. Early detection of ADHD in Preschoolers: results from a study in Navarra and La Rioja

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2. Factors that may predict a good response to pharmacological treatment

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3. Long term effects of medication for ADHD in weight and height in children and adolescents

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4. Important issues the treatment of ADHD in the transition from adolescence to adulthood

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GENERAL SYMPOSIUM-B ABSTRACT

Background: The management of ADHD across the lifespan has several challenges for the clinician: early detection, the decision to treat and how to treat, management of adverse events and partial responders, and transition to early adulthood. In this symposium we will review evidence-based steps that will help the clinician to decide on these challenges.

Method: We will present data from our samples both at the University of Navarra Clinic (UNC) in Pamplona and at Hospital Universitari Vall d'Hebrón in Barcelona (Spain). We will present the results on an epidemiological screening study of possible ADHD in preschoolers in La Rioja and Navarra; on potential predicting factor of treatment response; on the effects of treatment on height and weight, and on key issues on the transition from adolescence to adulthood.

Results: We found a prevalence of possible ADHD in 3.8 % of preschoolers ages 3 to <7 in our epidemiological study. We found some clinical factors (absence of comorbidity with ODD or Depression, and low scores in “forgetful” and “is spiteful and vindictive” ADHD-RS items) but very few neuropsychological factors (higher WISC-IV total score) associated with good response to ADHD treatment. In our sample of children with ADHD (N = 342 ages 6–18) treated with methylphenidate at the UNC for 27 (14 to 41) months, with a minimum of 1 month, and a maximum of 129 months, weight and BMI decrease slightly, and height is only affected by treatment if it was started before age 12. Children who started treatment younger or were taking higher doses, showed greater impact in height. Finally, early life stress factors were relevant to the transition of ADHD to adulthood and several clinical factors are associated to substance use disorders in adulthood.

Conclusion: There are evolving challenges in the treatment of ADHD that need to be predicted and addressed as they appear. Early detection and treatment, treatment response, medication adverse events management, and transition to adulthood are some of these challenges.

Detailed Abstracts of each talk.

Talk 1 Marín-Méndez et al.

M7-04-01

Early detection of ADHD in preschoolers: results for a study in Navarra and La Rioja

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Objective: Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder usually first diagnosed in school-age children (>6 years old). Because of this, the studies about ADHD are mainly focused in ages between 7–18 years old, but symptoms frequently start in preschoolers. There are few tools adapted to preschoolers and therefore few studies about this field. The goal is to estimate the prevalence of ADHD in a Spanish population of preschool children, and to standardize the ADHD Rating Scale–IV Preschool Version (ADHD-RS-IV) in Spanish language for boy and girls.

Methods: The sample of children 3 to <7 years old from Navarra and La Rioja was stratified and randomized. Both teachers and parents filled the ADHD-RS-IV-Preschool version. We chose the 93rd percentile in the ADHS-RS-IV in inattention, hyperactivity/impulsivity and total score as threshold cut-off points for “at risk for ADHD”. Parents also answered the Strengths and Difficulties Questionnaire (SDQ) and provided data about paediatric clinical history.

Results: We evaluated of 1,426 children (49.7 % males) in schools in the Spanish regions of Navarra and La Rioja; average age 4.7 (IC 95 % 4.65–4.74) years old. Prevalence of “at risk for ADHD” was 3.8 % (IC 95 % 2.7–4.8). Logistic regression analyses indicated significantly correlated with “at risk for ADHD”: ADHD family history (OR = 3.00 IC 95 % 1.30–6.91) and difficulties with fine motor skills (OR = 3.46 IC 95 % 1.16–10.31).

Conclusions: ADHD prevalence in preschool children in our two regions is similar to that published internationally (3.8 %) (IC 95 % 2.7–4.8). A family history of ADHD was a risk factor associated with suspected ADHD in our preschool sample. Early intervention directed to preschooler could be important in prevention and evolution of ADHD at latter ages.

M7-04-02

Factors that may predict a good response to pharmacological treatment

Pilar de Castro-Manglano, María Vallejo-Valdivielso, Azucena Díez-Suárez, Ana Figueroa-Quintana, César Soutullo

Objective: To review the clinical characteristics, course and treatment response of children with ADHD in our Outpatient Clinic sample, in a longitudinal, naturalistic follow-up study at the University of Navarra, in Pamplona, Spain and to describe predictive factors of good response to treatment with methylphenidate (MPH).

Methods: 497 patients were included meeting criteria for ADHD (Age 6–18, and main diagnosis of ADHD not due to substance abuse, IQ < 70, or Autistic spectrum disorder, not participating in a clinical trial). Patients were evaluated by a trained Child and Adolescent Psychiatrist using a K-SADS interview template, to evaluate baseline symptoms (Du Paul/SNAP/CGI), comorbidity course of illness (CGI at endpoint), and endpoint dose that achieved good response. We also evaluated patients with neuropsychological testing, including WISC, CPT and Stroop.

Results: Mean (±SD) age of our patients was 11.3 ± 3.2 years old. 82 % of patients were male, and 48.90 % had ADHD with comorbidity (ODD, Depression, Anxiety Disorders and Bipolar Disorder). According to the DSM-IV we classified ADHD into two groups including inattentive subtype (31.7 %) and hyperactive–impulsive and combined subtypes (68.3 %). Mean Baseline CGI-S score was 4.35 ± 0.6. Baseline ADHD-RS was: 31.1 ± 9. Mean of follow up 27 months (15–43 RIC). The most frequent ADHD-RS symptoms were: Disorganized, Avoids mental effort, distracted, and fidgets. Of the patients treated with MPH, 79.8 % of patients had full remission of symptoms, with a mean dose of 1.18 ± 0.46 mg/kg/day. There was

an association of worse response with lower IQ, and lower scores in “forgetful” and “is spiteful and vindictive” items at ADHD-rs, and ODD and Depression comorbidities, predict decreased likelihood of response to MPH.

Conclusion: The mean dose required to control symptoms was 1.2 mg/kg/day. There was some association between some neuropsychological results and a worse response to MPH, but these cannot be still used to predict response.

M7-04-03

Long term effects of medication for ADHD in weight and height in children and adolescents

Azucena Díez-Suárez, María Vallejo-Valdivielso, Juan Marín-Méndez, Pilar de Castro-Manglano

Objectives: Factors as gender, stimulant dose, duration of treatment and age when starting treatment remain unclear in previous studies about ADHD and growth. This article includes a large sample of Spanish patients and provides more data considering age and sex of patients. Our aims were: to describe weight, height and body mass index (BMI) evolution before and after treatment with methylphenidate, of a group of patients with ADHD.

Method: 342 patients (6–18 years old) with ADHD, treated with methylphenidate in the Child and adolescent Psychiatry Unit, University Hospital of Navarre, are included in a observational longitudinal study. Weight, Height and BMI-Z scores are measured at baseline and at last follow-up.

Results: Patients are 10.66 (3.84) years old 79.9 % are males. 68.6 % were children (6–12 years old), and 31.4 % adolescents when they started treatment. Weight and BMI are affected by treatment (weight: baseline 0.34 (1.22) SDS, follow-up -0.06 (1.38), $p < 0.001$); BMI: baseline 0.35 (1.10) SDS, follow-up: -0.23 (1.08) at, $p < 0.001$). There are no differences in height before and after treatment. However, in the group of children (6 to 12 years), height is slightly affected (baseline height-SDS 0.04 (1.14), follow-up -0.10 (1.11), $p < 0.001$). This effect is not observed in adolescents. There is a weak but significant correlation between age at starting methylphenidate and height-SDS ($r = 0.21$, $p < 0.001^{***}$), and also between the dose and all the anthropometric values ($r = -0.18$, $p < 0.001^{***}$ for weight-SDS, $r = -0.23$, $p < 0.001^{***}$ for height-SDS and $r = -0.18$, $p < 0.001^{***}$ for BMI-SDS). The duration of treatment did not correlate significantly with weight, height, or BMI.

Conclusions: Methylphenidate slightly decreases weight and BMI in this group of ADHD patients, and affects height only if treatment is started before 12 years old. Children who start treatment younger or are taking higher doses, show greater impact in height.

M7-04-04

Important issues the treatment of ADHD in the transition from adolescence to adulthood

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Background: ADHD is a chronic disorder that persists in adulthood in more than 50 % of children with ADHD. Due to this, it is important to study clinical factors that can be associated to persistence of

ADHD across the lifespan and clinical aspects that can modulate treatment during adulthood.

Method: The talk will present the results of a large sample of patients with persistent ADHD from the Hospital Universitari Vall d’Hebron in Barcelona. Comparison between ADHD adults with ($n = 236$) and without lifetime SUD ($n = 309$) regarding clinical characteristics of ADHD, externalization disorders, temperamental traits, environmental factors, academic history and family psychiatric history; secondly, ADHD subjects were compared to a non-ADHD group ($n = 177$) concerning those variables.

Results: The results of this study suggest a specific association between ADHD, SUD and early-age conditions, namely, ADHD subtype, CD and ODD comorbidity, temper characteristics (“fearful”, “accident prone”), “sexual abuse”, “be suspended from school” and family history of ADHD[4]. Finally, we found an interaction between genetics factors and early life stress factors than can be relevant to the transition of ADHD to adulthood.

Conclusion: Findings suggest a significant association between ADHD, SUD and early-age conditions, such as CD and ODD comorbidity; other variables from childhood, namely, ADHD subtype, temper characteristics (“fearful”, “accident prone”), “sexual abuse”, “be suspended from school” and family history of ADHD are associated to SUD in ADHD subjects, but not in non-ADHD subjects. Moreover, this study confirms both the higher prevalence of lifetime SUD and greater professional, social and personal impairment in ADHD subjects than in non-ADHD subjects. The assessment of early life stress factors can help clinician to manage ADHD across lifespan.

M7-05

22Q11.2 Deletion syndrome as a framework to better understand the development of psychosis

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Proposed symposium

Title

22q11.2 deletion syndrome as a framework to better understand the development of psychosis

Members

Symposium members: Stephan Eliez, M.D., University of Geneva, Switzerland

Doron Gohelf, M.D., University of Tel Aviv, Israel

Marco Armando, M.D., Paediatric Hospital Bambino Gesù, Italy

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Keywords: Schizophrenia; 22q11.2 deletion syndrome, Psychosis, Genetic.

Symposium overview

22q11.2 deletion syndrome (22q11.2DS) is one of the highest known risk factors for the development of psychosis, as up to 35 % of adults are diagnosed with a schizophrenia spectrum disorder (Schneider et al., 2014). Recent conceptualizations argue in favour of a clinical staging model in order to better understand the vulnerability factors involved in the development of psychosis in the general population (McGorry et al., 2010). Since the 22q11.2 deletion syndrome is often diagnosed at birth or early during childhood, it represents an ideal condition to examine the

clinical staging model and explore the developmental trajectories of individuals prior to the onset of psychosis.

In the proposed symposium, we wish to characterize risk for psychosis along a continuum of illness progression and chronicity. The first presentation aims at exploring schizotypal manifestations in the context of the 22q11.2DS, which represent one of the earliest stages of psychotic expression (E. Fonseca-Pedrero). The second and third presentations seek to characterize the ultra-high risk (UHR) state in individuals with 22q11.2DS and compare its clinical expression with other populations such as individuals with Williams Syndrome (D. Gothelf) or UHR individuals without the 22q11.2DS (M. Armando). Finally, the fourth and fifth presentations explore the cognitive and structural brain abnormalities in 22q11.2DS that may confer a risk for the development of schizophrenia (S. Eliez and M. Schneider).

M7-05-01

Atypical trajectories of structural and functional connectivity in 22Q11.2 deletion syndrome: relevance for schizophrenia?

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Objective: 22q11.2DS is associated with an increased risk for schizophrenia spectrum disorders. Current conceptualizations suggest that schizophrenia results from abnormal connectivity between brain regions (i.e. the “disconnection hypothesis”). The present study aims at examining the integrity of functional connectivity in the whole brain in individuals with 22q11.2DS. In a second step, we examined more specifically the structural and functional integrity of the default-mode network (DMN), which is particularly active in the absence of cognitive tasks and is involved in self-referential functions. Alterations of this network represent a promising endophenotype for psychiatric disease, especially schizophrenia.

Methods: 41 participants with 22q11.2DS aged between 8 and 28 years old (mean age = 17.1 ± 5.3; 17 males) and 42 typically developing controls undertook three different MRI sequences: a high-resolution T1-weighted sequence, a DTI and an 8 min resting-state fMRI sequence. For whole brain analyses, the fMRI signal was examined in 90 regions of interest. Pairwise Pearson correlations between the regions were used as measures of functional connectivity. In order to examine the functional and structural connectivity within the DMN, subject-specific regions of interest were determined based on an independent component analysis (ICA).

Results: Whole-brain analyses revealed that individuals with 22q11.2DS displayed altered modularity partition in the posterior visual network and in the frontal lobe including dysconnectivity of medial, dorsolateral and orbitofrontal regions. Cross sectional analyses indicated that visual, parietal and medial frontal alterations were already present in children and adolescents, whereas the dysconnectivity of the dorso-lateral prefrontal cortex was a characteristic of the adult group.

Furthermore, we observed that structural connectivity in the DMN was preserved in children and adolescents affected by the 22q11.2DS

whereas, in the group of adults, the mean number of tracts and the mean connectivity value were significantly reduced in two different networks: an anterior-posterior DMN network and an anterior DMN—left inferior parietal lobule network.

Conclusions: This study suggests that the development of functional and structural connectivity is atypical in individuals with 22q11.2DS. Whole-brain functional connectivity analyses suggest that 22q11.2DS is characterized by an altered development of frontal connectivity with age. More specific analyses within the DMN indicate that structural dysconnectivity in specific white matter tracts increases with age in individuals with the syndrome. Relevance of these results for the development of schizophrenia will be discussed in the oral presentation.

Keywords: 22q11.2 deletion syndrome, Connectivity, Schizophrenia.

M7-05-02

Neurodevelopmental risk factors for psychosis in 22q11.2 deletion syndrome and their treatment

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Background: The 22q11.2 deletion syndrome (22q11.2DS) and Williams syndrome (WS) are two common microdeletion syndromes with phenotypic similarities in the psychiatric and physical comorbidities and cognitive deficits. Yet, 22q11.2DS and not WS, is associated with high rates of schizophrenia-like psychotic disorder. The aim of our longitudinal study is to identify the phenotypic markers that are unique to 22q11.2DS and those that are associated with 22q11.2DS psychosis-risk. We will also present data on the effectiveness and safety of psychotropic medications in 22q11.2DS.

Methods: The genotype and phenotype of a cohort of 100 children and young adults with 22q11.2DS and 50 with WS have been studied longitudinally during the last decade. Comprehensive developmental (e.g., coding analysis of structured mother child-interactions), medical, neurocognitive (the cognitive neurobattery, CNB) and neuropsychiatric evaluations (e.g., Structured Interview for Prodromal Syndromes, SIPS) have been conducted. The effectiveness of psychotropic medications was assessed using standardized scales.

Results: In comparison to children with WS, individuals with 22q11.2DS were found to be more shy, expressed less positive emotions towards their mothers and exhibited lower levels of dyadic reciprocity. The catechol-o-methyltransferase (COMT) was associated with mother-child interaction abnormalities in 22q11.2DS. Adolescents and young adults with 22q11.2DS, compared to WS, exhibited face memory deficits and higher rates of negative symptoms compared to WS. Predictors for the evolution of psychosis in 22q11.2DS included history of preterm delivery, hypocalcemia, shyness and decrease in verbal IQ. Of our entire cohort 10 % have been treated with antipsychotics (mainly risperidone and olanzapine) for a psychotic disorder and 11 % have been treated with antidepressants (mainly fluoxetine) for anxiety and depressive disorders. We observed, ~50 % response rate based on the Clinical Global Impression-Improvement scores, in individuals with 22q11.2DS treated with antipsychotic or antidepressant medications.

Adverse events were similar in types and rates to those reported in non-22q11.2 individuals treated with antipsychotics or antidepressants.

Conclusions: The 22q11.2DS has a unique neurophenotype, including high rates of psychosis, which are beyond the nonspecific characteristics of developmental disabilities. The psychosis in 22q11.2DS is a neurodevelopmental process with aberrant developmental trajectories evident since preterm and progressing along childhood and adolescence. Common standard psychotropic medications seem to be safe in individuals with 22q11.2DS.

Keywords: 22q11.2 deletion syndrome, Risk factors, Treatment, Psychotropic medications.

M7-05-03

Adolescents at ultra-high risk for psychosis with and without 22q11 deletion syndrome: a comparison of prodromal psychotic symptoms and general functioning

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Objective: Genetic syndromes related to psychosis have become increasingly important for exploring the trajectory that leads to a psychotic onset. Among these genetic syndromes, a very significant opportunity for mapping earlier phases of the trajectory can be found in 22q11.2 deletion syndrome (22q11DS). Comparative studies have shown that schizophrenic disorder in 22q11DS largely resembles schizophrenia in the general population. Nevertheless, only few studies have investigated the features of prodromal symptoms in patients with 22q11DS. The aim of the present study was to investigate differences and similarities between two samples of 22q11DS clinically at risk for psychotic onset (UHR + 22q11DS group) and patients at clinical high risk for psychotic onset (UHR group).

Method: The study was conducted on a sample of 30 individuals with 22q11DS at UHR of psychosis (UHR + 22q11DS) and 80 individuals at UHR of psychosis but without 22q11DS (UHR). The two groups were compared in terms of positive, negative and depressive symptoms, level of general functioning and IQ. Analyses were conducted using independent t-test and Chi square. Individual z-scores were considered as a measure of dispersion.

Results: There was a significant group difference in negative symptoms, but no significant differences were found positive, global and total symptoms. The UHR + 22q11DS group showed lower level of general functioning. Moreover the clinical profile of the UHR + 22q11DS group appeared clearly more homogeneous.

Conclusions: These two UHR groups are comparable in terms of severity of positive symptoms which are the core symptoms for a diagnosis of psychotic disorder, even though they may require different attention from a diagnostic and therapeutic point of view.

Keywords: 22q11.2 deletion syndrome, Ultra-High Risk, Schizophrenia, Early Intervention.

M7-05-04

Schizotypal traits in adolescents with 22q11.2 deletion syndrome

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Abstract: Previous studies of children and adolescents with 22q11.2 Deletion Syndrome (22q11DS) have observed a heightened frequency of schizophrenia spectrum disorders and symptoms (clinical and subclinical level). From a developmental perspective, we may ask whether schizotypal traits in individuals with 22q11DS are associated to their liability to develop schizophrenia. The main purpose of the present study was to analyze the phenotypic expression of schizotypal traits in 22q11DS during adolescence, and examine potential association to high-risk state indicators and psychotic features over a period of approximately 4 years. The sample encompassed 61 adolescents with 22q11DS (M = 14.95, SD = 2.13; 28 boys; 23 subjects at follow-up). An aged-matched control group (N = 61, M = 15.44 years, SD = 1.76; 28 boys) was also included in the study. Schizotypal traits were assessed using the Schizotypal Personality Questionnaire (SPQ). Interview-based instruments to measure psychotic symptoms, such as the Structured Interview for Prodromal Syndromes, the Positive and Negative Syndrome Scale, and the Brief Psychiatric Rating Scale were used. The results show that schizotypal traits are very common in 22q11DS. In addition, 22q11DS adolescents scored higher than the control group on the negative dimension of the SPQ. The SPQ scores shows adequate psychometric properties, and were highly stable across a 3.6-year interval. Furthermore, schizotypal traits were associated with interview-based ratings of prodromal states and psychotic symptoms. These results may indicate that the liability for psychosis is expressed along a dynamic continuum of adjustment. Further longitudinal studies are required to examine to which extent schizotypal traits could contribute to the prediction of conversion to schizophrenia spectrum disorders in this kind of samples.

Keywords: Schizotypal, Schizotypy, 22q11.2 Deletion Syndrome, Adolescence; Risk.

M7-05-05

Atypical developmental trajectories of verbal and executive functioning in 22q11.2 deletion syndrome: relevance for the onset of psychosis?

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Objective: 22q11.2DS is associated with an increased risk for schizophrenia spectrum disorders. Schizophrenia literature suggests that cognitive deficits are present prior to the onset of the psychotic illness. However, the developmental trajectories of these cognitive deficits is likely to differ according to the cognitive domains (i.e. state or trait cognitive deficits). In the present study, our aim was to examine the developmental trajectories of intellectual and executive functioning in children and adolescents with 22q11.2DS compared to their typically developing peers. We also examined the contribution of psychotic symptoms to the observed findings.

Methods: 89 participants with 22q11.2DS and 86 typically developing controls aged between 6 and 16 years were assessed using the WISC-III and various neuropsychological tests assessing executive functioning (inhibition, updating, and processing speed). The participants were assessed between 1 and 4 times, for a total number of 152 and 143 evaluations, respectively. In the 22q11.2DS group, the presence of psychotic symptoms was also assessed at each timepoint during a clinical interview. Between group (22q11.2DS vs. controls) and within group (presence vs. absence of psychotic symptoms/anxiety) differences in the developmental trajectories of cognitive functioning were examined using mixed model regression analyses.

Results: Between group comparisons of the WISC-III raw results suggest that the evolution of visuo-spatial abilities is consistent with a developmental delay in the 22q11.2DS group (no shape but a significant intercept difference). On the opposite, verbal abilities and executive functioning were characterized by an atypical developmental trajectory. Individuals with 22q11.2DS and psychotic symptoms displayed significant differences in the shape of the trajectories for several subtests compared to individuals with 22q11.2DS but without psychotic symptoms. In particular, this was the case for the similarities, arithmetic, vocabulary, and object assembly subtests.

Conclusions: This study suggests that the developmental trajectory of verbal abilities and executive functioning in individuals with 22q11.2DS deviates from the normative group from the beginning of adolescence onwards. This atypical trajectory may be associated with abnormal neural pruning during adolescence, as suggested by previous studies (Schaefer et al., 2009). Our data also indicate that individuals with and without psychotic symptoms display distinct trajectories of verbal competences over time, in favour of individuals without psychotic symptoms.

Keywords: 22q11.2 deletion syndrome, Cognition, Executive functioning, Psychotic symptoms.

M7-06 TDAH y comorbilidades frecuentes

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En el presente simposio se presentan diversas comorbilidades asociadas al TDAH como son los problemas del sueño, la obesidad, el síndrome alcohólico fetal y el trastorno bipolar y problemas de dis-regulación emocional.

M7-06-01 Trastornos del sueño y TDAH

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Los trastornos del sueño en niños y adolescentes son frecuentes y comprenden un amplio abanico que oscila, dependiendo de la percepción de los padres, entre leves variaciones de la normalidad hasta graves problemas que interfieren negativamente en el desarrollo del niño (Rutter y Taylor, 2002). La prevalencia del síndrome de piernas inquietas (SPI) en niños y adolescentes es de 1–2 % y de los trastornos respiratorios del sueño de 2–3 % (Picchietti y Picchietti, 2008). Además, los trastornos del sueño pueden ocasionar problemas de atención e hiperactividad durante el día. De la misma manera la hiperactividad e inquietud durante el día puede producir problemas en el sueño (Rutter y Taylor, 2002).

En la práctica clínica habitual los trastornos del sueño en niños con TDAH son frecuentes e incluyen resistencia a irse a la cama, dificultad para iniciar y mantener el sueño, así como aumento de los movimientos durante el sueño comparándolos con niños sin TDAH (Owens et al., 2009). Disponemos de suficiente evidencia de que el trastorno biológico del sueño más frecuentemente asociado al TDAH es el SPI, afectando a un 26 % de pacientes con TDAH (Picchietti y Picchietti, 2008). El SPI puede producir fragmentación del sueño influyendo en la calidad de éste y conllevar un inadecuado descanso nocturno, con importante repercusión. Una de las causas secundarias más frecuentes del SPI son los niveles bajos de ferritina en plasma (Oner et al., 2007; Gozal y Kheirandish-Gozal, 2009).

Se repasarán los principales trastornos del sueño asociados al TDAH en niños y adolescentes. Se presentarán los datos de un investigación realizada por los autores en la que se valoraran mediante actigrafía los trastornos del sueño en niños diagnosticados recientemente de TDAH comparado con controles sanos.

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M7-06-02 Obesidad y TDAH

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El trastorno por déficit de atención con hiperactividad y la obesidad son dos trastornos muy frecuentes en la infancia.

Recientemente ha aumentado el interés por la asociación que puedan tener ambos trastornos. Algunos estudios han encontrado una tasa de prevalencia elevada de TDAH en pacientes obesos derivados a tratamiento para perder, correlacionándolo con una forma de comer más impulsiva, hábitos más desorganizados, más atracones y más

severos, comportamientos bulímicos y sintomatología depresiva, mayor insatisfacción y frustración que llevan a patrones nutricionales disfuncionales, como comer entre horas, levantarse por la noche a comer algo, atracones, comer en secreto, comer por alteración emocional o comer sin hambre.

Por otro lado, otros estudios aportan resultados en los que pacientes con TDAH presentan unos IMC mayores de lo esperado, tanto en niños como en adultos. Por lo que hay que tener en cuenta la contribución negativa que puede hacer el sobrepeso/obesidad a la evolución de los pacientes en el funcionamiento cognitivo pues hay trabajos en los que se ha encontrado una alteración de las funciones ejecutivas, atención, coordinación visoespacial, motricidad, velocidad de procesamiento y memoria de trabajo.

Ambos trastornos se influyen mutuamente, compartiendo impulsividad, falta de autorregulación, malos hábitos alimenticios y alteraciones en las funciones ejecutivas.

M7-06-03 Fetopatía alcohólica

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Introducción: Durante los últimos años se ha prestado una gran atención al papel de la exposición prenatal al alcohol en la producción de una gran variedad de trastornos conocidos como trastornos del espectro alcohólico fetal. Se considera la primera causa prevenible de defectos congénitos y deficiencia mental.

Objetivo: Realizar una actualización sobre este grupo de trastornos, revisando los aspectos más importantes en cuanto a la neurobiología, los nuevos criterios diagnósticos incluidos en el manual DSM-5 y la prevención y tratamiento, haciendo especial hincapié en las alteraciones cognitivas y conductuales asociadas, así como su asociación al fenómeno de adopción internacional.

Desarrollo: Las alteraciones del neurodesarrollo comprenden un amplio grupo de trastornos que se asocian al entorno psicosocial en el que se desarrolla el niño, de ahí la importancia del fenómeno de hipoestimulación durante los primeros años de vida en los pacientes adoptados de instituciones de países del este de Europa. Las funciones ejecutivas suelen encontrarse afectadas y la mayoría de los pacientes asocia un trastorno por déficit de atención/hiperactividad, aunque la comorbilidad puede ser muy compleja. Los estudios sobre la eficacia de tratamientos farmacológicos son escasos en esta población.

Conclusión: Es necesario conocer las manifestaciones clínicas, físicas y cognitivas propias de la exposición intrauterina al alcohol. Las medidas preventivas son eficaces y de vital importancia. Se necesitan estudios aleatorizados controlados con placebo para estimar la eficacia de los psicofármacos.

M7-06-04 Trastorno bipolar y TDAH en niños y adolescentes

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Antiguamente se creía que la enfermedad bipolar se iniciaba en la edad adulta temprana, y que los niños y adolescentes no sufrían esta enfermedad. Estudios recientes realizados por grupos de investigación independientes indican que los niños y adolescentes también pueden sufrirla. Sin embargo es complicado estudiar determinadas características en la población pediátrica, tales como fenomenología, epidemiología, formas de presentación clínica y respuesta a distintos tratamientos. Son sobre todo controvertidas las formas atípicas de bipolaridad en la edad pediátrica, los cuadros clínicos diagnosticados como enfermedad bipolar no especificada y la continuidad de este diagnóstico en la edad adulta tal y como la enfermedad bipolar se define en la actualidad (AACAP, 2007).

Gran parte de la información disponible sobre esta enfermedad en menores de 18 años proviene de estudios retrospectivos en adultos. Se estima que el 20–40 % de los adultos bipolares comenzaron con síntomas afectivos en la infancia (Geller et al., 1997), y el 0,3–0,5 % antes de los 10 años (Goodwin et al., 1990).

En el 20 % de pacientes con enfermedad bipolar existe un TDAH comórbido. El curso del trastorno bipolar es episódico, siendo patentes de forma más clara los síntomas de TDAH en períodos intercrisis, lo que puede ayudar en el diagnóstico diferencial. Más recientemente, con la inclusión en el DSM-5 del Trastorno de la disregulación emocional, los retos diagnósticos se intensifican, siendo necesario explorar la clínica del paciente de forma detallada y exhaustiva para realizar un buen diagnóstico diferencial (Asherson et al., 2014).

El objetivo de esta ponencia es presentar de forma detallada la sintomatología clínica de los tres trastornos (T.Bipolar, TDAH y T.Disregulación emocional) de acuerdo a la evidencia científica disponible para mejorar las habilidades clínicas y científicas de los profesionales dedicados a tratar a pacientes con estos trastornos.

M7-07-01 Anorexia nervosa in adolescence: overgeneralization in autobiographical memory and disease duration

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Background: Autobiographical memory stores the personal history from which the Self is constructed. It is fundamental for the development of one's self-concept in adolescence. Moreover, the capacity to recall personal experiences contributes to social interaction, to emotion regulation and to social problem solving.

In depression, post-traumatic stress disorders, schizophrenia and eating disorders a predominance of over general autobiographical memories was described.

Aim: The purpose of our research is to confirm whether anorexia nervosa in teen-aged may define changes of autobiographical memory and whether this is influenced by the presence of other psychopathological traits and by the disease duration.

Materials and methods: It was considered a sample of 90 adolescents affected by anorexia nervosa, mean age 15.4 years, compared to a group without history of psychiatric disorders, comparable for sex, age and socio-economic family level.

For the analysis of the ability of autobiographical memory was administered the Autobiographical Memory Test of Williams and Broadbent (AMT). It consists in the recalling of autobiographical memories in response to 10 emotional cue words, five positive and five negative, selected from the list used in previous research and that have been successful with adolescent clinical population. Moreover,

all the subjects filled in the Eating Disorders Interview 3rd edition (EDI-3), the TAS-20 for the evaluation of alexithymia, and the CDI, to disclose depressive traits.

Results: The results have allowed to detect that the anorexic patients, compared to controls, recall more over general memories than specific ones, in response to both positive and negative cues. This pattern tends to increase significantly in relation to the illness duration and is not affected by the presence of depressive symptoms and alexithymia.

Discussion: Subjects with anorexia nervosa tend to suppress or control not only the negative emotions but also the positive ones, allowing us to support that eating disorders are general deficit of emotional regulation that significantly influence the structuring and retrieval of autobiographical memories. Overgeneralization of memories was shown to be correlated with the duration of the disorder: the degree of chronicity seems to have a destructive effect on memory. Therefore, a relevant dysregulation of emotional processes and the consequent affective disorder might contribute in the lack of a sense of identity in adolescents with AN.

M7-07-02 Disordered Eating Behaviours and related Risk and Protective Factors: first epidemiological survey in Austria

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No representative epidemiological data about prevalence rates of disordered eating behaviours and eating disorders is available for children and adolescents in Austria up to now.

One aim of the MHAT (Mental Health in Austrian Teenagers)-Study was to investigate the prevalence of disordered eating behaviours and eating disorders and related risk and protective factors.

A large population sample of children and adolescents aged 10 to 18 years in Austria was recruited (n = 3610, 55 % girls). A two stage design was applied. In the screening phase, the SCOFF questionnaire was used to identify disordered eating behaviours. Structured clinical interviews were used to obtain DSM 5 diagnoses in a second phase. Risk and protective factors were also assessed.

Within the screening, 30.9 % of girls [95 % confidence interval (CI): 28.9; 33.0] and 14.6 % of boys [95 % CI: 12.9; 16.3] scored above the defined cut-off score of two in the SCOFF. The most prevalent symptoms were “food thoughts” (31.0 % females [95 % CI: 29.0; 33.0], 23.3 % males [95 % CI: 21.2; 25.3]) “losing control over food” (31.8 % females [95 % CI: 29.7; 33.8], 14.1 % males [95 % CI: 12.4; 15.7]) and “body dissatisfaction” (28.2 % females [95 % CI: 26.2; 30.1], 11.0 % males [95 % CI: 9.5; 12.5]). “Weight loss” was slightly, but not significantly, more prevalent in boys (10.5 % females [95 % CI: 9.2; 11.2], 12.2 % males [95 % CI: 10.6; 13.8]). The less prevalent symptom was “intentional vomiting” (6.1 % females [95 % CI: 5.1; 7.2], 5.1 % males [CI 95 %: 4.1; 6.2]).

Identified risk factors were “parent relations and home life” [girls Odds Ratio (OR) = 2.9; boys OR = 1.6], “school environment” [girls OR = 2.7; boys OR = 2.2], “social acceptance” [girls OR = 2.3; boys OR = 2.7], “low socioeconomic status” [girls OR = 2.1; boys OR = 1.5], “stressful life events” [girls OR = 1.5; boys OR = 1.7], “experience of violence or abuse” [girls OR = 1.8; boys OR = 2], “absence of an adult attachment figure” [girls OR = 2.0; boys OR = 1.8] and “physical illness” [girls OR = 1.5;

boys OR = 1.6]. “Social support” [OR = 1.8], “absence of a biological parent” [OR = 1.3] and “physical” [OR = 1.5] or “mental” [OR = 1.6] “illness within the family” only affect girls, “migration background” [OR = 1.5] only boys.

Our study indicate high prevalence of disordered eating behaviours for adolescents, confirming other studies. Data from the interview phase is currently evaluated and will provide prevalence rates for the following DSM 5 diagnoses: anorexia nervosa, bulimia nervosa, binge eating disorder, pica, rumination, avoidant/restrictive food intake disorder as well as additional risk and protective factors and data on psychiatric and psychotherapeutic health care utilization.

M7-07-03 Autoaggressive behavior and eating disorders symptoms in referred adolescents—disconcerting findings

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Oral presentation proposal

Summary: We present preliminary results of an ongoing study of psychopathological features of referred adolescents (males N = 69, females N = 81, 14–18 yoa, mean age 16 years). Investigation is being conducted after their initial interview with a mental health professional (CAP) with a set of self-reporting questionnaires. Autoaggressive behavior is present in more than 50 % of adolescents. Aberrant attitude and behavior towards food and eating is prevalent (40 %), and is often a method of autoaggressive behavior (40 % are obsessed with food, weight, body image, 20 % induces vomiting). Clinical course of disorders in such patients is more complicated and treatment is more demanding compared to adolescents without autoaggressive behavior. 80 % of adolescents stated that they have attempted suicide at least once. The elevated life-time suicide risk associated with self-harm means that finding a way to identify and support undetected cases is crucial. Understanding individual motivation and meaning of autoaggressive behavior is essential for treatment planning and risk management. Only 20 % of them had ever sought help for psychological problems, including for autoaggressive behavior. This is a warning to mental health professionals on one hand and an opportunity for creating programs and services adapted to local situation on the other.

TUESDAY

T1-01 The early start denver model with autism—part 2: language and cultural adaptations

Chairs: Liliana Ruta and Sally Rogers

General overview

Early identification and intervention in autism spectrum disorders (ASD) is of high importance to maximize the outcomes in individuals with the condition. However effectiveness and sustainability of early detection and intervention programs for ASD are still under debate and cross-cultural stability as well as language and cultural specificity requires further investigation. This symposium, bound to the symposium entitled “Early interventions for children with autism spectrum

disorders” aims to add the scientific contribution of three speakers from Euro-Mediterranean countries such as Italy and Israel. Dr. Liliana Ruta will present results from the first integrated program on early detection and Early Start Denver Model (ESDM) intervention in toddlers with ASD in Italy, whilst Dr. CostanzaColombi, will present strengths and challenges of delivering an evidence-based treatment for ASD such as the ESDM in young children within the Italian Public Health System and finally Dr. TaliGev will discuss about the adaptation of the ESDM model to an existing ASD preschool setting in Israel.

Individual presentations

- CostanzaColombi (Autism and Communication Disorders Center [UMACC], University of Michigan): “Feasibility of the Early Start Denver Model (ESDM) within the Italian Public Health System.”
- Liliana Ruta (Institute of Clinical Physiology, National Research Council of Italy, Messina, Italy; Department of Developmental Neuroscience, Stella Maris Scientific Institute, Pisa, Italy): “Prima Pietra: a research and clinical program on early detection and intervention in Italy”
- TaliGev (Bar-Ilan University, Ramat-Gan, Israel; The Association for Children at Risk, Israel): “Applying The Early Start Denver Model (ESDM) in ASD preschools in Israel – A Pilot Study”.

Individual abstracts

T1-01-01

“Effectiveness and feasibility of the early start denver model (esdm) intervention within the italian public health system”

Costanza Colombi¹, Giovanni Valeri², Rosamaria Siracusano³, Liliana Ruta^{3,4}, Virginia Cigala³, AntonellaGagliano⁵, Giovanni Pioggia³, Francesca Famà³, Giuseppe Maurizio^{Arduino6}, Carlo Calzone⁷, Angela Magazù⁷, A. Filippo Muratori⁴, Annarita Contaldo⁴, Antonio Narzisi⁴, Francesca Faggi⁸, Niccolò Collin⁸, Carla Sogos⁹, ESDM network

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Background: Despite the fact that more children than ever are being diagnosed or identified as at-risk for ASD in the first years of life (Lord et al., 2012), and despite strong evidence for the significant impact of early intervention that begins immediately following diagnoses (Koenig et al., 2014), access to developmentally appropriate treatment is quite limited, and this is particularly true for very young children. The Early Start Denver Model (ESDM) Italian Network aims to directly addresses these challenges by delivering and evaluating a gold-standard treatment for ASD in young children, the Early Start Denver Model (ESDM: Rogers and Dawson, 2010), adapting delivery to meet the needs of the Italian population within the Public Health System.

Objectives: The objective of the ESDM Italian Network is three-fold. First, it aims to develop a model for delivering an evidence-based treatment for ASD in young children within the Italian Public Health System. Second, it aims to train and build capacity with behavioral

health provider in the Italian Public System to deliver the intervention in a sustainable way. Third, it aims to reduce parenting stress in caregivers and thereby enhance the resilience of family functioning alongside improvements in child outcomes.

Methods: Participants comprised toddlers and preschoolers diagnosed or identified as at-risk for ASD accessing intervention in 7 Italian Public Child Neuropsychiatry Departments. Autism diagnoses were confirmed with the Autism Diagnostic Observation Schedule, and cognitive abilities were assessed using the Griffiths Developmental Quotient or the Bailey Scales of Development. Children received ESDM treatment delivered by certified therapists or by therapists in training under the supervision of and ESDM trainer. Children received between 2 to 10 h of treatment per week for 6–24 months and were assessed at entry, after 6 months, and at the end of the intervention.

Results: Preliminary results show that children are making progress as demonstrated by gains on the ESDM Curriculum Checklist, on the Griffiths Developmental Quotient and on the Bailey Scales of Development. Five therapists are now certified in Italy and other therapists are learning the model as demonstrated by improvements on the ESDM fidelity measure.

Conclusion: Our preliminary results suggest that it is possible to learn and deliver the ESDM intervention within the resources of the Italian Public Health System. Children’s progress represents an additional support of ESDM as an effective early intervention model. Establishing the feasibility and the effectiveness of the ESDM in our study represents an important step toward wider access to this evidence-based model outside the United States in a sustainable way. In future, we aim to extend delivery by involving the Italian school system so that the time that children with ASD spend with special education teachers and educators can be maximized by implementing an evidence based ASD specific early intervention.

T1-01-02

Prima Pietra: a research and clinical program on early detection and intervention in Italy

Liliana Ruta^{1,2}, CostanzaColombi³, Virginia Cigala¹, Rosamaria Siracusano¹, Maria Boncoddò⁴, Francesca Famà¹, Antonio Narzisi², Giovanni Pioggia¹, Antonella Gagliano⁴, Filippo Muratori¹

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Background: Early identification and intervention is highly recommended to improve the outcome in autism spectrum disorders (ASD) (Matson et al., 2012; Dawson, 2008), but early detection and intervention programs for ASD in Italy still represent a clinical challenge. “Prima Pietra”—developed at the Institute of Clinical Physiology of the National Research Council of Italy c/o the University Hospital “G. Martino” in Messina (Sicily)—is the first study in Italy assessing effectiveness and sustainability of an integrated screening and intervention program for ASD.

Aspects of adaptation and integration within the Italian culture, cross-cultural stability and cultural specificity were examined as well as factors associated with treatment responsiveness.

Methods: A web-based population screening was conducted through the pediatricians of the National Health System of the province of Messina (Sicily) during the routine health visits at 18 months, using the M-CHAT checklist (Robins et al., 2001). If a child failed the checklist, the web-

based platform alerted via e-mail the research team and a trained psychologist administered the M-CHAT follow-up interview over the phone in order to verify the autism risk in the child. A diagnostic assessment based on the Autism Diagnostic Observation Schedule, Griffith's Developmental Scale, Vineland Adaptive Scale, McArthur Language Test and Child Behaviour Checklist (CBCL) was conducted to those children who were still at risk after the MCHAT phone interview, as well as to all the children aged 18–30 months who were referred to the child psychiatry unit of the University Hospital "G. Martino" in Messina for autism risk. ESDM intervention was delivered in the research centre by a multidisciplinary team with a staff-child ratio of 1:1 and an intensity of 8–10 h/week over a 12 months period. Personalized learning objectives were defined on the basis of each child's ESDM curriculum assessment every 3 months. To ensure fidelity to the ESDM guidelines (Rogers and Dawson 2010) all staff members attended an introductory and advanced training and regular supervisions from a certified ESDM trainer. The core staff members reached ESDM fidelity within a year.

N = 37 ASD children (34 males and 3 females) aged 18–36 months have been enrolled in the intervention program so far. Outcome measures such as developmental level, language, ASD symptom severity and adaptive skills were measured every 3 months using the same assessment battery as at baseline. N = 30 children completed the 6 months follow-up and n = 15 children completed the 12 months intervention and quit the program.

Results: A total of n = 1146 children from the pediatric population of the province of Messina were screened through the web-based MCHAT and n = 76 children failed the MCHAT checklist. At the follow-up phone interview N = 15 children were still at risk of ASD and 7 out of the 15 children confirmed an ASD diagnosis, with a positive predictive value PPV = 0.47.

Results from the ESDM intervention showed significant improvements in cognitive skills and adaptive functioning with gains ranging from 15 to 25 points at the Griffith's Developmental Scale and at the Vineland Adaptive Scale. Receptive and expressive language demonstrated the highest gains with 22 out of 30 children (73 %) who developed at least single word communication after 6 months of ESDM intervention.

Conclusions: We presented the first study investigating adaptation and integration of an early screening program and an evidence-based early behavioural intervention, such as the ESDM, within the Italian culture. Evidence from the web-based screening program on a low-risk population in Sicily demonstrated that the M-CHAT can be adapted and implemented in the context of the public health system and presents a good cross-cultural stability to detect early young children at risk for ASD in a pediatric setting. Furthermore, consistently with the other ESDM studies conducted in different cultural and delivery settings, ESDM intervention in our Italian cohort demonstrated significant efficacy in promoting language, development and adaptive skills, suggesting that even relatively intensive implementation of behaviourally based early intervention programs such as the ESDM ensure a significant improvement in toddlers with ASD.

T1-01-03

Applying the early start Denver model (ESDM) in ASD preschools in Israel—a pilot study

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Background: The Early Start Denver Model was previously shown to be effective as an intensive home-based intervention (Dawson et al., 2010). However, in Israel, the majority of young children diagnosed

with ASD attend Autism daycares and preschools, funded by the ministries of Health and Education. It is therefore of high importance to assess the efficacy of the ESDM when applied in this setting. Recent attempts to implement this model in a preschool setting have shown encouraging results in terms of developmental gains made by children receiving the intervention, and the overall feasibility and practicality of the program (Vivanti et al., 2014).

The current pilot-study presents an adaptation of the ESDM model to an existing ASD preschool setting in Israel.

Methods: The intervention includes 12 children (aged 3:00–3:09) from three ASD preschools, and is comprised of 2 h/week of individual ESDM-based sessions with a therapist in training and a weekly parent-child "live-training" 1-h session. Integration of the ESDM-based intervention in the daily preschool routine included presentation of the model, the curriculum and learning objectives to the therapeutic and educational staff, and an ongoing demonstration of teaching techniques at various contexts (1:1 sessions, group activities, playground, mealtimes etc.).

Results: Changes in children's social-communication and adaptive behavior skills will be measured after 5 months of intervention.

Conclusions: Preliminary findings will be presented and conclusions regarding the incorporation of the ESDM in an existing preschool setting will be discussed.

T1-02

Adolescent conduct disorder: first results of the femNAT-CD consortium

C. Freitag, C. Stadler

Goethe University Hospital Frankfurt am Main, Frankfurt am Main, Germany; University Hospital Basel, Basel, Switzerland

Chairs: Christine M. Freitag (Frankfurt am Main), Christina Stadler (Basel)

Bernhard A, Brauer A, Ackermann C, Schwenck C, Freitag CM (Frankfurt am Main): Comorbid psychiatric disorders in female and male adolescents with CD

Kerstin Konrad (Aachen): Neuropsychological data associated with emotional regulation in adolescent conduct disorder

Oldenhoff H, Nauta-Jansen L, Popma A (Amsterdam): Physiological parameters in relation to conduct disorder in girls: preliminary results from the FemNAT-CD study

Stadler C (Basel): Mindfulness, stress tolerance and emotion regulation: A Psychotherapeutic Approach for Female Adolescents with Conduct Disorder

The symposium presents first results of the multi-centric, EU-funded consortium "FemNAT-CD", which aims at studying the phenomenology and underlying neurobiology of female adolescent conduct disorder. CD is one of the most common reasons for referral to Child and Adolescent Mental Health Services and has a highly negative impact on the affected individual as well as their families, teachers, and society. It is one of the major reasons for school dropout and affects approximately 15 % of all adolescents in Europe. Although the number of females exhibiting serious aggressive behaviours is growing, the majority of studies on biomarkers, neurocognitive phenotypes, and therapeutic treatment of CD have focused on male subjects only, despite strong evidence for a differential aetiology of female CD. As a consequence, female CD remains a highly neglected research area resulting in a significant gap of knowledge on neurobiological mechanisms underlying the development of the disorder in females leading to an absence of sex-specific targets for prevention and intervention. Over the last decades the prevalence of CD characterized by aggressive and antisocial behaviours violating the rights of others and societal rules (DSM-IV TR,

ICD-10) has increased in the western industrialized world. European and North American studies have reported a prevalence of CD of around 1–3 % in girls and 2–5 % in boys, with rates increasing during puberty. Conduct problems (including subclinical symptoms) are observed in approximately 14 % of girls and 16 % of boys in Europe. Here, we present first results on psychiatric comorbid disorders, neurocognitive and neurophysiological findings in female versus male adolescents with CD. In addition, we present a new psychotherapeutic approach for female adolescents with ODD and CD, which will be studied within the FemNAT-CD consortium.

T1-02-01 Comorbid psychiatric disorders in female and male adolescents with CD

C. M. Freitag, A. Bernhard, A. Brauer, C. Ackermann, C. Schwenck, FemNAT-CD consortium (Frankfurt am Main)

Background: The rate of comorbid psychiatric disorders in adolescents with CD is high. CD and CD symptoms are highly correlated with symptoms and diagnoses of oppositional defiant disorder (ODD), attention deficit-hyperactivity disorder (ADHD), substance use disorder (SUD), anxiety and depressive disorders, and post-traumatic stress disorder (PTSD). In adolescent females with CD, especially a high rate of comorbid anxiety and depressive disorders accompanied by mood swings, emotional instability and reactive aggression (RA) has been described. Furthermore, the rate of PTSD, the number of traumatic events, and the numbers of suicides are increased in females compared to males with a history of CD. The aim of the present study is to differentially describe the rate of comorbid psychiatric disorders in female and male adolescents with CD, explore age-of-onset and age related effects as well as correlation with reactive or instrumental aggression and callous-unemotional traits.

Methods: Age and IQ matched female and male adolescents with CD aged 9–18 years old are included into this preliminary analysis. History of and current psychiatric disorders are assessed by the K-SADS-PL, a structured interview with primary caregiver and offspring. Reactive and intentional aggression is measured by the Reactive/Proactive Questionnaire (RPQ), and callous-unemotional traits by the Inventory of Callous-Unemotional Traits (ICU).

Results: Preliminary results show a higher rate of mood disorders and PTSD in females with CD compared to males. Rates of ADHD are similar. Age and IQ are not related to rate of comorbid psychiatric disorders. ICU traits are comparable in females and males with CD, and high CU traits are associated with a lower rate of mood disorders in females with CD.

Conclusions: Our preliminary results show a differential pattern of comorbid psychiatric disorders in females and males with CD. This information is relevant for the development of gender specific prevention and therapy approaches.

T1-02-02 Neuropsychological data associated with emotional regulation in adolescent conduct disorder

Kerstin Konrad, Gregor Kohls, Beate Herpertz-Dahlmann, FemNAT-CD consortium (Aachen)

Background: Successful accomplishment of the developmental tasks of childhood and adolescence requires emotion regulation, and the

ability to adequately process and regulate emotions plays an important role in both healthy adjustment and mental health problems. Subjects with Conduct Disorder (CD) show impaired emotional processing abilities, however still little is known about the exact neurocognitive patterns of emotion dysregulation and the influence of gender, comorbidities, history of trauma, or psychopathic traits on emotional processing in paediatric CD. Thus, the aim of the present study is to investigate emotional recognition, emotional regulation, and the ability to learn from aversive experiences (passive avoidance learning) in a large sample of children and adolescents with CD who are carefully characterized with respect to their medical history and current and past psychopathology.

Methods: First data from 160 cases with CD and age-, sex- and IQ-matched controls aged 9–18 years are included into this preliminary analysis. Three computerized emotional processing tasks are applied to all participants. Emotion regulation is assessed by the Emotional Go/Nogo task and emotional recognition by the Emotional Hexagon task, testing the ability to identify facial expressions, such as anger, sadness or disgust. Emotional Learning is measured by a short passive avoidance learning paradigm. In addition, IQ, trauma history, current and past psychopathology and callous-unemotional traits are assessed across all subjects.

Results: Preliminary analyses show impaired recognition of sadness, anger and disgust as well as impaired cognitive and emotional control in CD cases compared to unaffected controls. Subjects with CD also made significantly more commission errors during the late learning phase in the passive avoidance task indicating impaired learning from aversive experiences. So far, no gender differences could be detected. Effects of trauma history, comorbidities and CU traits will be further analysed.

Conclusions: These preliminary results demonstrate the complex nature of emotional processing deficits in subjects with CD. Identifying specific associations between clinical symptoms and emotional processing deficits might help to delineate distinct developmental pathways to paediatric CD which are relevant for more individualized treatment options.

T1-02-03 Physiological parameters in relation to conduct disorder in girls: preliminary results from the FemNAT-CD study

H. Oldenhoff, L. Nauta-Jansen, A. Popma, FemNAT-CD consortium (Amsterdam)

Background: The autonomic nervous system (ANS) is one of the most extensively studied biological systems in relation to antisocial behavior. Peripheral ANS parameters include heart rate (HR) and heart rate variability (HRV). Changes in ANS activity may serve both as a biomarker for psychopathology and as an indicator of treatment response, further supporting the clinical relevance of investigating ANS activity. Several authors have now proposed integrative models for ANS activity in relation to psychopathology in general and aggression specifically. These models stress the need to investigate multiple ANS parameters under both resting conditions and during task performance to capture the complex interplay of these parameters during emotion regulation. With respect to low autonomic (re)activity, as reflected in low resting HR and low HR during stress, there is an extensive literature reporting relationships between these measures and antisocial behavior in boys and, to a lesser extent, in girls. Notably, some studies have observed increased, instead of reduced, autonomic functioning in aggressive girls. This pattern may be explained by true sex differences or by CD girls showing higher rates of internalizing comorbidity and reactive aggression (RA), while scoring lower on instrumental

aggression (IA) and callous-unemotional (CU) traits. In this respect, vagally controlled heart rate variability (HRV) is also a relevant parameter of arousal. It is thought to reflect prefrontal cortical function, with low HRV being related to poor top-down control of emotion regulation and deficient adaptation to stressful stimuli. Therefore, we hypothesize that distinct profiles of ANS functioning can be observed in individuals with CD, showing patterns of low autonomic (re)activity (HR) compared to controls. We expect similar findings for females and males with CD. In addition, we hypothesize that low HRV and high HR relate specifically to RA and internalizing co-morbidity, while high HRV and low HR are specifically associated with IA and CU-traits.

Methods: ANS parameters are obtained using the VU-Ambulatory Monitoring System (VU-AMS). Basal ANS parameters are measured during a 4-min resting protocol. ANS reactivity is measured during a countdown task and while watching an emotion evoking film clip. Reactive and intentional aggression is measured by the Reactive/Proactive Questionnaire (RPQ), and callous-unemotional traits by the Inventory of Callous-Unemotional Traits (ICU).

Results: Preliminary results will be presented on HR and HRV in CD girls versus controls as well as CD girls versus CD boys. Furthermore we will present correlations between RA, IA, and CU-traits and HR and HRV.

Conclusions: Clinical implications of these preliminary findings will be discussed. Differential autonomic functioning in subgroups of CD girls, for example those showing higher HR levels and lower HRV in relation to reactive aggression and internalizing problems, may inform clinician to first focus on emotion regulation skills in these individuals before addressing antisocial cognitions.

T1-02-04

Mindfulness, stress tolerance and emotion regulation: a psychotherapeutic approach for female adolescents with conduct disorder

L. Kersten, C. Stadler, FemNAT-CD WP7 (Basel)

Background: Adolescents with conduct disorder (CD) frequently suffer from high impulsivity, violent outbreaks, low stress tolerance, reduced emotion regulation skills, and few positive relationships. Without professional help, many adolescents and adults with CD stay in community or correctional systems. Effective and directed treatment programs are needed in order to prevent crises caused by the disruptive or violent behavior of the adolescent with CD to ensure that these individuals receive adequate care. The aim of the present study was to conduct an evaluation of a skills program specifically designed for inmates with behavioral disorders.

Method: The study used a retrospective cohort design utilizing linked administrative data maintained by the Connecticut Department of Correction and Correctional Managed Health Care at the University of Connecticut. Descriptive statistics and generalized estimating equations with negative binomial distribution regression analyses were used to assess the relationship between program participation and behavior over time ($N = 967$ participants).

Results: Number of sessions attended was negatively associated with disciplinary actions. Beginning with baseline each additional session resulted in a 3.5 % reduction in the average number of disciplinary tickets received across the measured time period. Treatment effects were robust across gender, race/ethnicity, education level, criminal history and psychiatric diagnostic classifications, suggesting that the treatment was beneficial for a great variety of incarcerated adolescents and adults.

Conclusion: START NOW offers a viable and effective treatment for inmates with CD symptoms. It is cost-effective and flexible, thereby responding to the specific needs and problems associated with mental health care within correctional settings.

Since START NOW's core elements and foundation appear to address needs and problems that are often found in female teenagers with CD, the skills program was chosen as the basis for FemNAT-CD work package seven. Materials (facilitator's manual, participant workbooks and practice exercises, training materials) were translated into German and Dutch while modified to specifically target and address the needs of conduct disordered adolescent girls. A current randomized controlled study investigates START NOW's effectiveness.

T1-03

From research to clinical practice: adolescent and prevention

P. Ruiz-lazaro, M. Zapata-usabel, L. Rojo

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Given the incidence of eating disorders in adolescence, a serious disorder with significant mortality and morbidity, it is not surprising that primary and secondary prevention programs for eating disorders are receiving attention in the scientific literature. In the last years the field of eating disorders prevention has seen a considerable growth despite the minimal resources dedicated to it. Eating disorders programs have developed independently in many countries. The purpose of the symposium is an update on prevention efforts specially on recent surveys in Spain.

T1-03-01

ZARIMA program: secondary prevention of eating disorder and overweight in north of Spain

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A two-stage approach was used, which involved the screening with the EAT-26 of a population large sample of 1,846 adolescents aged 12.38 and subsequent semi-structured interviews.

During the 2007, 1,846 students seventh-grade in 73 classrooms in 37 schools of North of Spain. The intervention is financed by F.I.S. PI 05/2533.

Results: A total number of 897 girls (48.6 %) and 949 boys (51.4 %) participated voluntarily. A 11.00 % (95 % CI 9.4–13.5) of the girls and a 7.9 % (95 % CI 6.4–9.8) of the boys were classified at risk of ED (high scorers).

The prevalence rates (DSM-IV) for girls was 1.3 % (95 % CI 0.8–2.3) for ED Non Otherwise Specified (EDNOS). Overall ED prevalence in boys was 0.1 % (95 % CI 0.0–0.6) for EDNOS. Overall prevalence in adolescents was 0.7 % (95 % CI 0.4–1.2) for EDNOS. The prevalence rates ($P < .05$) for girls was 31.4 % (95 % CI 28.3–34.6) for

Overweight. Overall prevalence in boys was 22.9 % (95 % CI 20.3–25.8). Overall prevalence in adolescents was 27.9 % (95 % CI 25.0–29.2) for Overweight.

The prevalence of ED and Overweight in early adolescents of North of Spain is similar to those reported for other developed countries.

Keywords: EA, PRE, MCS.

T1-03-02

Randomised controlled trial: results at 12 months follow-up

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Introduction: The ZARIMA programme has proved to be effective when evaluated scientifically (result in a decrease statistically significant in the incidence of eating disorders in intervention group) at the 1 year follow-up using standardized methods. Objective: Selective prevention of Eating Disorders (ED) in adolescents. Methods: Randomised controlled trial with measurements pre- and post-intervention. Sample: During the 2007, 1,558 students seventh-grade in 29 schools of North of Spain were randomly assigned to intervention (IG) and control groups (CG). Work was effected with ZARIMA programme. The intervention is financed by F.I.S. PI 05/2533. Results: At baseline in 2007 we studied 1,558 students seventh-grade in 73 classrooms. In IG we studied 84/921, the 9.12 % (CI 95 % 7.386–11.111), were classified at risk of ED and in CG 92/892, the 10.31 % (CI 95 % 8.444–12.441). The difference is estimated as 0.012, was not significant. In 2008, at 12-month follow-up, we studied 1,633 students eighth-grade (response rate: 90.1 % 2007). In IG 37/825, the 4.48 % (CI 95 % 3.224–6.065), were classified at risk of ED and in 51/807, the 6.32 % (CI 95 % 4.791–8.161). The difference is estimated as 0.018, was significant (IC 90 % 0.00112 a 0.03568 CONFINT 3.0 PEPI, Abramson and Gahlinger, 1993–1999).

Conclusion: At 12-month follow-up ED risk decrease in IG (specially in girls) more than in CG. The difference between two population proportions (IG and CG students classified at risk of ED, high scorers EAT-26) was significant.

Keywords: EA, PRE, MCS.

T1-03-03

DITCA CV program: detection and prevention of eating disorders applying new technologies

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Introduction: The DITCA program has proved to be effective when evaluated scientifically.

Objective: Early detection and prevention of eating disorders in the Valencian school population aged 13–15 years.

Method: Double screening using the ChEAT and an on-line diagnostic program, followed by an expert interview for clinical diagnosis. The program was offered to all the schools in the region of Valencia. One year type participate 18,000 pupils eighth-grade (45–50 % of the school population). The 8 % were classified at risk of ED and 1 % ED DITCA cases. The program is On line with web <http://www.ditca.net>.

Keywords: EA, PRE, MCS.

T1-04

Adolescent forensic research in Europe I. An EFCAP symposium

C. Van Nieuwenhuizen, M. Manetsch, K. Schmeck

Tilburg University, Tilburg, The Netherlands; University of Basel, Basel, Switzerland

Symposium overview:

Recidivism and Personality in a Swiss Adolescent Prison Population. Dr. Madleina Manetsch, University of Basel, Switzerland.

Criminal recidivism in a delinquent child welfare sample. A longitudinal study. Professor Klaus Schmeck, Kinder- und Jugendpsychiatrische Klinik Universitäre Psychiatrische Kliniken (UPK) Basel, Switzerland.

Risk factors in juvenile forensic psychiatric patients: a latent class analysis. Professor dr Chijs van Nieuwenhuizen, Tilburg University, Scientific Center for Care and Welfare (Tranzo), and GGzE Center for child and adolescent psychiatry.

Forensic Child and Adolescent Mental Health (FCAMHS) in the United Kingdom: Who is Doing What, Where and How? Dr Nick Hindley, Consultant Child and Adolescent Forensic Psychiatrist, Thames Valley Forensic Child and Adolescent Forensic Mental Health Service, Oxford Health NHS Foundation Trust, Oxford and Oxford University, UK.

Abstracts

T1-04-01

Recidivism and personality in a Swiss adolescent prison population

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University of Basel, Basel, Switzerland

Personality and its possible antisocial trajectories were described as early as the 1940s (Cleckley, 1941). Moffitt (1996) examined the antisocial course during childhood and adolescence. Sevecke (2008) showed that a high percentage of juveniles in the prison population are diagnosed with an antisocial personality. Also Kaszynski et al. (2014) found many personality disordered youth in their prison population.

It is well established that an adolescent prison population shows psychopathic traits and high rates of recidivism. Nevertheless, a detailed examination of other aspects of personality could further our understanding in regards to recidivism.

Personality and Character, as described with the Juvenile Temperament and Character Inventory (JTIC) show four temperament and

three character aspects. This study examines personality and recidivism of this specific population.

Keywords: Developmental trajectories, Antisocial development, Personality development, Recidivism.

T1-04-02

Recidivism of adolescents in the Swiss juvenile justice and child welfare system

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Objective: International studies have revealed that the rate of recidivism in juvenile delinquents is very high, reaching from 45 to more than 80 % of the adolescents with a criminal record. Longitudinal studies are necessary to detect predictors of negative outcome so that interventional approaches can be targeted on those factors that increase the risk of recidivism.

Method: A representative sample of 592 adolescents and young adults (402 boys, 190 girls; mean age 16.1 years, SD 3.1) from 64 Swiss residential care institutions for delinquent adolescents was assessed with diagnostic interviews for axis I and II psychopathology and self-rating questionnaires for the screening of traumatization, substance abuse, self-reported delinquency and personality traits. In collaboration with the Swiss Federal Statistical Office we have made a follow-up of the legal status of all participants.

Results: 74.3 % of participants had one or more psychiatric disorder, 80 % reported one or more traumatic life event in their history. At follow-up a total of 299 of the 592 participants had a criminal record. In the 3 years after the end of the study 144 (24.3 %) had been convicted. 56 of them committed their first crime, 88 recidivated. Recidivism was higher in boys (OR 2.4), in adolescents with externalizing disorders (OR 2.2), and in adolescents with former convictions (OR 4.1) or substance use disorder (OR 3.1). Migration status was not associated with a greater risk of conviction or recidivism.

Conclusion: Delinquent adolescents in residential care show an extensive burden of individual and psychosocial risk factors. To improve the long-term outcome of these adolescents highly intensive treatment approaches that address the special needs of this population are essential.

Keywords: Juvenile delinquency, Mental disorders, Recidivism.

T1-04-03

Risk factors in juvenile forensic psychiatric patients: a latent class analysis

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There is a substantial amount of research on different aspects of risk factors predicting anti-social behavior and delinquency. The most

prominent risk factors were divided in four domains: the individual, family, peer and school domain. In addition, there are numerous studies on subgroups with different trajectories of antisocial behavior. However, little is known about patterns of co-occurring risk factors for antisocial behavior in (delinquent) adolescents. The aim of this study is to distinguish heterogeneous subgroups of juvenile forensic psychiatric patients in order to optimize their treatment and to diminish their problem behavior. Based on the results of prior studies, subgroups with a different risk profile were expected to be found. In this study several risk factors, divided in four domains, were operationalized for which the Structured Assessment of Violence Risk in Youth (SAVRY), the Juvenile Forensic Profile (FPJ) and file information were used. These risk factors were scored for 276 boys, age 14 to 23 admitted at a youth forensic psychiatric hospital in the Netherlands. Latent Class Analysis was used to identify subgroups.

Results showed that four classes could be identified. The largest group comprised youngsters with risks in the individual, peers and school domain. A large proportion of youngsters in this class scored high on frequent drug use; they suffered from a conduct disorder or pervasive development disorder. Type of offenses was mainly violent offenses and property offenses without the use of violence. The second largest group consisted of youngsters with risk in all domains. In this class, there was also a large proportion of youngsters that scored high on frequent drug use. Moreover, they suffered from a conduct disorder and one-third of the youngsters class was at risk of the development of cluster B personality traits. Type of offenses was primarily property offenses. The smallest group comprised youngsters with risks in the family domain. They suffered from conduct disorder, ADHD or reactive attachment disorder. About half of this group was never convicted for a criminal offense. Finally, a quarter of the youngsters fitted in a class with risk in the peer domain (severe rejection and lack of a positive, secondary network). They suffered from pervasive development disorders, were convicted for sexual offenses and (mild) violent offenses.

The conclusion is warranted that juvenile forensic psychiatric patients form a heterogeneous group with different patterns of co-occurring risk factors. Treatment should be aimed at the specific risk factors of each subgroup.

Keywords: Juvenile offenders, Latent class analysis, Risk factors.

T1-04-04

Forensic child and adolescent mental health (FCAMHS) in the United Kingdom: who is doing what, where and how?

Dr. Nick Hindley

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Abstract

Introduction: This presentation will focus on the development and distribution of community FCAMHS provision in the UK. It will provide information about the current state of affairs in terms of the organisation, commissioning, functions and geographical distribution of FCAMHS teams and other services working with young people either in the criminal justice system or who present elsewhere with high risk behaviours. It will also outline a series of core functions which can be expected of a comprehensive FCAMHS team.

Background: Considerable focus has been placed on the needs of young people in forensic in-patient settings and the needs of young

people in other secure care. This has led to the development of a nationally commissioned in-patient FCAMHS network in the UK. Less attention has been paid to the needs of high risk young people in community settings and the means by which there is coherent linkage and organisation of services for high risk young people with complex needs.

Methods/key points: This paper will present results from external evaluations of a regional FCAMHS service and a national UK survey specifically designed to elicit information about service provision. It will present a validated FCAMHS service model but at the same time will reveal the heterogeneity and patchy nature of current community FCAMHS provision.

Conclusions: A coherent working model for FCAMHS is feasible and has proved practicable. However, nationally, commissioning arrangements and provision are varied and there is little coherence in terms of service planning. There is now an opportunity for development of more coherent national provision for high risk young people in the UK.

Keywords: Community forensic child and adolescent mental health, Service evaluation, Service development, High risk young people with complex needs.

Declaration of Interest: none

T1-05

Service gaps and innovations for youth with ADHD: evidence from Ireland and the UK

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Chair and discussant: Prof Fiona McNicholas MD FRCPsych Dip Clin Psychotherapy

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NB PLEASE SEND CORRESPONDENCE RE THIS SYMPOSIUM TO mimi.tatlow@ucd.ie.

Symposium Overview:

Attention Deficit Hyperactivity Disorder (ADHD) is one of the most common disorders treated in Child and Adolescent Mental Health Services in many countries, with estimated international childhood prevalence rates of 5 %. However, recognition that ADHD persists into adulthood for approximately two-thirds of those diagnosed in childhood is relatively recent and adult ADHD services are underdeveloped. Youth with ADHD transitioning from child services may therefore be particularly vulnerable to service gaps.

This symposium reviews current ADHD-specific service gaps in transitioning from child to adult mental health services in Ireland and UK, drawing on case note review evidence from major Irish and UK studies of child and adolescent mental health service transitions (iTRACK and TRACK). These studies have identified young people with ADHD as being among those least likely to transfer to adult mental health services. Reasons include: (i) non-selection for transfer by child services, (ii) non-acceptance by adult MH services, or (iii) young people themselves refusing transfer to adult services. The symposium will also present the lived experience of youth with ADHD in a disadvantaged urban setting, from the perspective of young people, healthcare workers and clinicians, with recommendations for primary care and other service improvements. Finally, the symposium will review existing evidence for young adult ADHD services, and present an innovative university-based ADHD service

model, which may present an alternative to adult services that is more acceptable and potentially less stigmatising to youth.

The symposium hopes to stimulate collaborative efforts from child and adult service providers to develop and evaluate much needed multidimensional adult ADHD services.

Presenters:

1. Title: How big is the ADHD transition gap?: Evidence from the TRACK (UK) and iTRACK (Ireland) case note review studies.

Prof Fiona McNicholas and Prof Swaran Singh

Institutions:

Prof Fiona McNicholas: Department of Child Psychiatry, Our Lady's Hospital for Sick Children, Crumlin, Dublin; Lucena Clinic Dublin; and University College Dublin, Dublin, Ireland

Prof Swaran Singh: Head of Division, Mental Health and Well-being, Warwick Medical School, University of Warwick; Honorary Consultant Psychiatrist, Birmingham and Solihull Mental Health Foundation Trust, Birmingham, United Kingdom

2. Title: Young people with ADHD in socio-economically disadvantaged urban areas: Young people's and healthcare workers' views.

Ms Dorothy Leahy

Institution: Graduate Entry Medical School, University of Limerick, Limerick, Ireland

3. Title: ADHD young adult service innovations: A combined child and adult psychiatry led pilot university-based ADHD service.

Dr Mimi Tatlow-Golden

Institution: School of Medicine and Medical Science, University College Dublin, Dublin, Ireland

Presentations:

T1-05-01

How big is the ADHD transition gap?: evidence from the track (UK) and iTRACK (Ireland) case note review studies

Prof Fiona McNicholas^{1,2,3}, Prof Swaran Singh^{4,5}, +authors

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³University College Dublin, Dublin, Ireland; ⁴Head of Division, Mental Health and Wellbeing, Warwick Medical School, University of Warwick, Coventry, UK; ⁵Honorary Consultant Psychiatrist, Birmingham and Solihull Mental Health Foundation Trust, Birmingham, UK

Abstract:

Background: Attention Deficit Hyperactivity Disorder (ADHD) is one of the most common disorders treated in CAMHS, with estimated international prevalence at 5 %, but recognition that ADHD persists into adulthood for approximately two-thirds is relatively recent, and adult services are underdeveloped. For all conditions, services are at their weakest during transitions from child and adolescent mental health services (CAMHS) to adolescent mental health services (AMHS), but gaps in transition to adult services may be particularly severe for individuals with ADHD.

Aim: This presentation summarises evidence relating to ADHD transitions drawing on case studies from two recent major European case note review studies, iTRACK in Ireland and TRACK in the UK.

Methods: Both studies employed clinical case note review, to identify clinical and socio-demographic details, factors that informed decisions to refer or not refer to AMHS, and ascertain information exchanged between services during transition.

Results: Case notes in both countries identified young people with a diagnosis of ADHD to be among those least likely to be referred and accepted by adult mental health services. Multiple reasons underlie

this, including non-acceptance by adult services, non-referral by clinicians in child services, due to perceived lack of further treatment needs, lack of adequate adult services, or a perception by child clinicians that adult services would not accept them. In addition, young people themselves were more likely to refuse transfer to adult services.

In Ireland, participating clinicians identified 62 young people, 19 of whom were diagnosed with ADHD (32 %), who had crossed the CAMHS-AMHS transition boundary in 2010; CAMHS clinicians considered 47 (76 %) to have on-going MH service need, but just 15 (32 %) of these were referred. Young people with ADHD were significantly less likely to transfer to AMHS ($\chi^2(2, 45) = 8.89$, $p = 0.01$), and were also significantly more likely to refuse transfer ($\chi^2(2, 45) = 6.81$, $p = 0.01$, $\phi = 0.44$). Nearly half of cases (45 %) with perceived MH need were eventually transferred back to their GP, without assurance that they had the necessary support structures in place.

Similarly, in the UK, case note review found that those with neurodevelopmental disorders including ADHD were among those more likely to fall through the CAMHS-AMHS gap. Case studies from these transition studies will be presented.

Conclusions: Attitudinal factors contribute to the lack of transition from CAMHS to AMHS for young people and individuals with ADHD seem to be disproportionately affected. Closer working collaboration between CAMHS and AMHS will help provide accurate information regarding referral criteria; ensure the recognition of the need to develop services for adults with ADHD. On-going qualitative research should be carried out to investigate the high refusal rates among ADHD youth to onward referral.

T1-05-02

Young people with ADHD in socio-economically disadvantaged urban areas: young people's and healthcare workers' views

Ms Dorothy Leahy¹, Dr. Elisabeth Schaffalitzky¹, Dr. Claire Armstrong¹, Dr. Linda Latham², Professor Fiona McNicholas³, Professor David Meagher¹, Dr. Yoga Nathan¹, Dr. Ray O'Connor¹, Professor Veronica O'Keane⁴, Dr. Patrick Ryan⁵, Dr. Bobby P. Smyth⁶, Dr. Davina Swan¹, Professor Walter Cullen³

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⁴Trinity Centre for Health Sciences, Tallaght Hospital, Dublin 24, Ireland; ⁵Department of Psychology, University of Limerick, Limerick, Ireland; ⁶Department of Public Health and Primary Care, Trinity College, Dublin 2, Ireland

Abstract:

Background: In Ireland, evidence to date from clinicians indicates that recognition of persistence of ADHD into young adulthood is mixed and services are very limited. Furthermore, given that ADHD left untreated is often associated with comorbid Substance misuse, often times this diagnosis takes precedence, and ADHD remains untreated and acts to perpetuate the substance misuse. Primary care (with appropriate training and resources) could play a crucial role in identification and management of young people with ADHD. This qualitative study had the overarching aim of examining the role of primary care (with a particular focus on the role of the GP) in providing treatment including early intervention for both ADHD and substance use problems in young people in Ireland.

Aim: The aim of this portion of the study was to explore the lived experience of youth with ADHD in disadvantaged urban settings,

from the perspective of young people, healthcare workers and clinicians, with recommendations for service improvement.

Method: Semi-structured interviews were conducted with young people ($n = 20$) and healthcare workers ($n = 37$) from primary care, secondary care and community agencies in two socio-economically disadvantaged areas: Limerick City and Dublin South Inner City.

Findings: In socio-economically disadvantaged areas in Ireland, young adults with ADHD struggle to find appropriate services. It appears that adult psychiatry services in the areas studied do not recognise ADHD as an adult mental health problem. In a number of instances, ADHD diagnosis was linked to drug addiction and criminality. Health care workers in socio-economically disadvantaged areas expressed a range of views: some believed that too many young people were receiving ADHD diagnoses with over reliance on medication, arguing for lifestyle changes instead. Others suggested ADHD diagnosis and appropriate treatment can improve outcomes, as it reframes behaviour within the context of the disorder. Healthcare workers highlighted the need for awareness and training in youth mental health problems among teachers to enable early identification and faster referrals to appropriate services.

Conclusions: In socio-economically disadvantaged areas in Ireland, service options for young adults with ADHD need to be explored including education and supports for GPs and other healthcare workers.

T1-05-03

ADHD young adult service innovations: a combined child and adult psychiatry-led pilot university-based ADHD service

Dr Mimi Tatlow-Golden¹, Ms Martha Neary¹, Dr Niamh Farrelly², Dr Udo Reulbach¹, Prof. Fiona McNicholas¹

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Abstract:

Background: In Ireland, despite reports of four- to ten-fold increases in the last decade in numbers of students in higher education institutions registered as having ADHD, the numbers remain low. In one university, Trinity College Dublin, which had nearly 17,000 students in 2013 and which has the highest number of disabled students in higher education in Ireland, the numbers of students with ADHD registering with the Disability Service increased from 7 in 2007–2008 to 28 in 2010–2011. Young adults with ADHD face particular social, educational and personal challenges in the transition to university. However there is no mandated transition planning in Ireland and young adults with ADHD face service-related challenges including access, and negative attitudes and lack of expertise among healthcare professionals. Furthermore, young adults who do attend AMHS often experience it as stigmatising, designed for meeting the needs of older patients, and excluding of parents/carers. Therefore, models of care other than AMHS may be more suitable for young adults with ADHD attending university, if these are more accessible and less stigmatising. However, compared to studies of ADHD services for children and adolescents, services for young adults with ADHD in higher education settings is less studied.

Aim: This presentation will (i) review existing international evidence for young adult ADHD university based services, and (ii) present initial explorations of an innovative university-based ADHD service model in Ireland, which may be more acceptable and potentially less stigmatising to young adults.

Methods: A systematic literature review of university based ADHD service models will be presented. This supplement semi-structured

interviews with clinicians who participated in a pilot service in Trinity College Dublin. This pilot service ran over a 2 year period (July 2012–2014) and involved a child psychiatrist joining the adult psychiatry team half day per week, and jointly running ADHD specific clinics. This clinic used the ‘Canadian ADHD Resource Alliance’ (CADDRA) practice guidelines for assessment, implementing a multidisciplinary treatment approach including Occupational Therapy, pharmacotherapy and psychological treatment when indicated. Assessment and follow-up data were collected on each case in a systematic manner as per the CADDRA guidelines and will be presented. Semi-structured interviews will be conducted in Jan 2015 to elicit their perspectives. Thematic content analysis (Braun and Clarke, 2005) will be inductive and deductive.

Results: Deductive themes to be explored will be: clinicians’ views of barriers and facilitators of this novel service; links to existing student disability support services on campus; feasibility of service, and clinicians’ views of student reasons for accessing this service rather than another (e.g., AMHS, GP). Further themes will be identified inductively.

Conclusions: This exploratory qualitative study of clinicians’ perspectives, combined with evidence from the literature, will highlight relevant issues in the treatment and assessment of university students with ADHD, inform future development of a university-based pilot study, and assist those who wish to explore non-AMHS service alternatives.

T1-06-01

Manic symptoms in adolescents after sexual assault: preliminary findings from a longitudinal study

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Background: Prevalence of sub-threshold manic symptoms in community adolescents is estimated at 1.1–1.5 %. They have been associated with social impairment and higher rates of psychopathology. In adult Post-traumatic Stress Disorder (PTSD), sub-threshold manic symptoms have been linked with increased lifetime suicidal risk. In adolescents, rates of Bipolar Disorder and Psychotic Disorder increase post-sexual assault (9 to 12 %) but studies of sub-threshold symptoms are lacking.

Aim of this study: To determine prevalence, characteristics and social impact of manic symptoms in sexually assaulted adolescents.

Methods: Design: Sub-analysis of a prospective longitudinal cohort study. Population: 13–17 year-olds presenting to a sexual assault centre <6 weeks post-assault. Baseline assessment included socio-demographic data and screening questionnaires: Short Mood and Feelings Questionnaire (depressive symptoms), Self-Report for Childhood Anxiety-Related Disorders (anxiety symptoms) Impact of Events Scale (PTSD symptoms), Strengths and Difficulties Questionnaire (SDQ). Follow-up at 4–6 months post-assault (T1) also included a structured psychiatric diagnostic assessment (DAWBA-DSM-IV Diagnoses).

Results: Data are available for $n = 94$ at baseline and $n = 60$ at T1 (mean [SD] age: 15.16 [1.24] years; 96 % female). Preliminary baseline characteristics: Those with learning disability or of black ethnicity were over-represented compared to local population (18 vs. 2.5 %, and 23 vs. 11 %, respectively). 15 % had a history of non-consensual sex and 44 % were known to social services. 39 % had sought mental health help in the previous year. 73 % were at high risk for Depressive Disorder, 90 % for PTSD and 69 % for Anxiety-Related Disorders.

Preliminary T1 results: The DAWBA bipolar module was completed by $n = 49$ at T1 (81.7 %). Of these, $n = 26$ (53.1 %) screened positive for episodes of elevated mood (vs 28 % in community adolescents), the majority (24 of 26) reporting sub-threshold symptoms that lasted <4 days. Two of the 49 cases met criteria for Bipolar Disorder (4 vs. 0.1 % in community adolescents). Median (IQR) SDQ Impairment scores for those with episodes of elevated mood vs those without ($n = 49$) were 3(5) and 1(2) respectively, this difference being statistically significant, $U = 162.50$, $p = 0.003$, $r = 0.458$. Further associations of sub-threshold manic symptoms will be described.

Conclusion: Prevalence of Bipolar Disorder and sub-threshold mood symptoms was increased in sexually assaulted adolescents. Sub-threshold manic symptoms were significantly associated with social impairment.

Keywords: Adolescent hypomania, Sexual assault.

T1-06-02

Are antipsychotics a risk factor for type 2 diabetes in youth?

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Keywords: Antipsychotics, Children, Adolescents, Diabetes, Meta-analysis.

Introduction: Second-generation antipsychotics (SGA) are being used increasingly in children and adolescents for a variety of psychiatric disorders. Although there are less neuromotor adverse effects compared to first-generation antipsychotics, cardiometabolic adverse effects and weight gain—both being associated with an increased risk for type 2 diabetes (T2DM)—are more frequent with many SGAs and can start even after brief exposure and at low dosages.

As children and adolescents appear to be even more vulnerable for metabolic adverse effects than adults and as in adults a clear link between antipsychotic treatment, impaired glucose tolerance, insulin resistance and the risk of developing T2DM has been shown, concerns about the risk of T2DM in children and adolescents treated with antipsychotics have been rising. However, due to scarce long-term data in youth, the risk for T2DM in pediatric patients receiving antipsychotics is unclear.

Methods: Systematic PubMed/Medline search on 12/15/2014 since database inception and random effects meta-analysis of T2DM of studies with ≥ 20 youth, aged ≤ 24 years, reporting incidences of T2DM in antipsychotic-exposed youth with/without control groups.

Results: Eight studies reported on T2DM development in 65,126 youth exposed to antipsychotics (126,393.89 patient years, mean age = 14.2 years, 57.6 % male) with/without a psychiatric control group ($n = 106,218$; 353,885 patient years) and/or healthy control group ($n = 246,843$; 874,822.60 patient years).

Antipsychotic-exposed youth had a T2DM incidence/1,000 patients of 0.062 (95 % confidence interval (CI) 0.029–0.127, $p < 0.0001$). The incidence/100 patient years was 0.57 (95 % CI 0.467–0.689; $p < 0.0001$). Compared to healthy controls, antipsychotic-exposed youth had a significantly greater T2DM incidence (studies = 5, odds ratio (OR) 2.421 (95 % CI 1.270–4.616, $p < 0.007$), and exposure-adjusted incidence rate ratio (IRR) (studies = 5, IRR = 2.535, 95 % CI 1.158–5.548, $p = 0.019$). Similarly, even compared to psychiatrically ill controls, antipsychotic-exposed youth had significantly higher T2DM incidence (studies = 5, OR 2.209; 95 % CI 1.252–3.899; $p = 0.006$) and exposure-adjusted IRR (studies = 5, IRR = 2.003, 95 % CI 1.152–3.484, $p = 0.018$).

Conclusion: The distal outcome of T2DM seems to be rare in antipsychotic-exposed youth. However, incidences and IRRs were significantly higher than in healthy and also psychiatric controls. Nevertheless, long-term studies are scarce and large database studies adjusting for potential confounders and cardiometabolic risk differences are needed. Given the observed T2DM risk, antipsychotics should only be used after lower-risk interventions have failed, and inappropriately low metabolic monitoring must be remedied.

T1-06-03

First psychotic break in adolescents: differences between affective and schizophreniform disorders

Cláudia Barroso, Filipa Sá Carneiro, Ana Duarte Carvalho, Luísa Confraria, Otilia Queirós

Oporto Hospital Center, Department of Child and Adolescent Psychiatry, Porto, Portugal

Diagnostic predictors in first psychotic break in adolescents:

Differences between affective disorders and schizophreniform disorders

Introduction and aims: Diagnosis during the initial stages of first-episode psychosis (FEP) is particularly challenging but early intervention and treatment are crucial to potentially achieving better clinical outcomes, and to alleviate the psychological impact on patients and their families. Diagnostic changes during follow-up are not uncommon with a FEP. This study aimed to identify factors that can aid in a more accurate distinction between symptoms of non-affective psychosis and bipolar disorder.

Methods: This is retrospective cross-sectional study. Subjects included were admitted to a child and adolescent psychiatric unit with first psychotic break, so as their relapses, from January 2009, to November 2014. A structured data sheet was used to collate the data, all files have been reviewed by the investigators. The inclusion criteria where, age under 18, and the presence of psychotic symptoms in a first psychotic break. Any patient admitted at the unit with a suspicion of first psychotic break that was not confirmed at follow-up, was excluded. Data were analysed using the Statistical package for Social Sciences, version 21.0.

Results: 92 patients between 13 and 17 years old were included, 61 % of them were male. Symptoms of presentation were assessed. 95 % of the sample had delusional activity at time of presentation. Disturbance of thinking, specifically conceptual disorganization and formal thought disorders were most likely to be seen in the sub-group whose diagnosis was Schizophreniform disorder, compared to the sub-group of affective disorders with psychotic symptoms ($p = 0,007$). Persecutory delusional ideas were significantly associated with schizophreniform disorder diagnosis at time of discharge, compared to affective disorders with psychotic symptoms diagnosis ($p = 0.009$). Total insomnia was also found to be more frequent in the sub-group of schizoaffective disorders, although values were non-significant ($p = 0.08$).

Discussion: Early recognition and intervention is essential to better outcomes in FEP. A better knowledge of the distinctive patterns of presentation of non-affective psychosis versus bipolar disorder can help clinicians to target these disorders more accurately, specifically in terms of pharmacological treatment. Recognition of early signs of psychosis can help reduce the duration of untreated psychosis.

Keywords: First episode psychosis, Premorbid function, Psychosocial outcome, Prediction.

T1-06-04

Cortical thickness and surface area abnormalities in offspring of schizophrenia and bipolar patients.

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Background: Structural brain abnormalities in unaffected first-degree relatives of patients with schizophrenia and bipolar disorder have been widely studied (Li et al., 2012), yet there is a lack of research addressing this issue in children and adolescents. No study so far has examined the two disorders comparatively employing measures of brain morphology. We set out to examine the patterns of cortical thickness (CT) and surface area (SA) measures in offspring of schizophrenia (SzO) and bipolar disorder (BpO), as compared to controls. **Methods:** SzO (n=30) and BpO (n=48) as well as healthy controls (n=52) were recruited at the Child and Adolescent Psychiatry and Psychology Department of the Hospital Clínic i Provincial, Barcelona (age range 6-18 years). A high-resolution T1-weighted 3-dimensional sequence was obtained on a 3T Siemens Magnetom Trio Tim. Measures of surface area were computed using the standard FreeSurfer pipeline (v.5.3.0, Fisch et al., 1999). Whole-brain vertex-wise group comparisons were carried out using Qdec with a minimum uncorrected threshold of $p < 0.001$. Age, gender and total intracranial volume were considered as nuisance variables.

Results: Relative to controls, SzO subjects presented decreased CT in the bilateral fusiform gyrus and reduced SA in clusters within the left rostral middle frontal and middle temporal cortices. BpO exhibited decreased CT in the superior temporal cortex and right fusiform gyrus as well as reduced SA within the left superior temporal cortex, while they presented increased area in the left temporal pole. The SzO vs. BpO comparisons showed reduction of CT and SA for the former group in the left fusiform and bilateral superior temporal cortex.

Conclusions: The present findings reveal CT and SA reductions in fronto-temporal areas in subjects at genetic risk for psychosis, which may be more pronounced for SzO. The structural brain abnormalities observed in unaffected SzO and BpO, support the notion that neurodevelopmental alterations are evident prior to disease onset and may index genetic susceptibility to disease.

T2

Brain imaging in ADHD: Disorder-specificity, medication effects and clinical translation

Rubia K.

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I will present our recent meta-analyses on structural, functional and biochemical brain abnormalities in ADHD patients, evidence for specificity of these abnormalities relative to other child psychiatric disorders, effects of medications on these brain abnormalities, and non-pharmacological brain-based neuro-therapy in the form of fMRI neurofeedback.

Our meta-analysis of cross-sectional structural MRI studies shows that medication-naïve ADHD children have most consistent abnormalities in the basal ganglia and insula, which parallels our meta-analysis of positron emission tomography (PET) studies showing consistently abnormal striatal dopamine transporter levels. Our meta-analyses of functional MRI studies show cognitive domain-specific abnormalities in dissociated fronto-striatal and fronto-cerebellar networks mediating inhibition, attention and timing functions as well as problems to deactivate the default mode network, both together associated with impaired performance. Disorder-specificity of brain abnormalities will be elucidated by several meta-analyses comparing brain structure and function between patients with ADHD and patients with OCD and with autism. Our meta-analysis of acute stimulant effects on the function of the ADHD brain shows most prominent upregulation effects in right inferior frontal cortex, insula and striatum. Long-term stimulant medication treatment appears to be associated with more normal brain structure and function but with abnormal dopaminergic neurochemistry in the form of upregulation of striatal dopamine transporter levels. Little is known on Atomoxetine effects, but our direct comparisons to Methylphenidate show similar acute inferior frontal upregulation and normalisation effects. Clinical translation of neuroimaging findings in ADHD is only just emerging in the form of non-pharmacological neuro-therapy. An exciting new avenue is real-time fMRI-Neurofeedback in ADHD of areas that have been found to be dysfunctional. A proof of concept study will be presented at the conference.

T3-01

Potential mechanisms underlying the association between obesity and mental disorders and therapeutic implications

Hebebrand J.,

LVR-Klinikum. University Duisburg-Essen

Mental disorders have been shown to be associated with obesity. The initial evidence stemmed from clinical studies that assessed the body mass index of patients with specific psychiatric disorders. Associations were also picked up by probing for mental disorders such as mood disorders or attention deficit/hyperactivity disorder (ADHD) in patients with obesity. These initial clinical associations led to population based studies which were mostly able to confirm such associations. Furthermore, longitudinal studies have provided evidence to support bidirectionality: Probands with elevated depression scale scores gained on average more weight than non-depressed children, adolescents or adults. Vice versa, probands with obesity have been shown to have an elevated risk for the development of major depression. However, the data is not totally consistent. Gender differences have been observed; moderator effects such as socio-economic status also need to be considered. Furthermore, some studies also found evidence for a predictive value of underweight for the development of depression. Finally, large scaled adult studies have reported a protective effect of obesity for suicide.

Potential biological mechanisms can be classified according to 1) an overlapping genetic predisposition between obesity and the respective mental disorder, 2) inflammation, which has been shown to be associated with obesity and major depression, and 3) overlapping pathways involved in both mental function and body weight regulation. A lower socio-economic status is associated with both obesity and several mental disorders.

Obesity rates have increased substantially in many countries during the last decades of the 20th century leading to the term 'obesity

pandemic'. Increments were particularly pronounced for children and adolescents in both industrialized and emerging countries. For mental disorders there is some evidence to indicate that rates have also increased during this time period; the increase in help-seeking behavior has been documented unequivocally. Potentially environmental and societal factors that have entailed the obesity pandemic are also relevant for secular trends observed for some mental disorders. In particular, a reduction of physical activity is well documented in children and adolescents. This decreased physical activity level may predispose to the development of both overweight and specific mental disorders. Finally, nutrition has changed dramatically during this time period; the increase in consumption of processed foods is particularly relevant. Accordingly, dietary interventions have been proposed as a strategy for the treatment of depression.

Our presentation will focus on major depression and ADHD; we provide an overview of this research field and discuss potential therapeutic implications.

T3-02

A ROADMAP for mental health research in Europe

Marta Miret, Ph.D.

Department of Psychiatry, Universidad Autónoma de Madrid, Spain; Instituto de Salud Carlos III, Centro de Investigación Biomédica en Red de Salud Mental, CIBERSAM, Spain; Department of Psychiatry, Hospital Universitario de La Princesa, Instituto de Investigación Sanitaria Princesa (IP), Madrid, Spain.

Mental disorders place immense burdens on individuals, their families and society. This burden is increasing in Europe, especially when compared to the relative burden of physical health problems. Mental health research can help to resolve these burdens. Funding for mental health research in Europe is much lower than the population impact of these disorders, with spending being less than half the disability burden. But there is evidence of a large return on investment. ROAMER (Roadmap for Mental Health and Well-being Research in Europe) has developed a comprehensive and integrated mental health research roadmap, focused on improving the mental health of the population and increasing European competitiveness. ROAMER analysed existing resources in European regions, and obtained input from over 1000 individuals and stakeholder organisations. Evidence-based recommendations were prioritised through iterative feedback, consensus meetings, international advisory boards and surveys of researchers, experts and stakeholders in Europe. ROAMER designed research priorities to take advantage of Europe's existing infrastructures and research strengths and to address timely challenges in European society. The answers to these research questions can guide European policy, mental health service provision and treatments. This will also provide the highest return on research investment, improve the lives of people with mental health problems and their families, and increase European productivity. Analyses of contemporary European research produced six high level priorities for policy action that are practical, targeted, actionable, built on excellent European science and resolvable in the next 5 to 10 years. The answers to these proposed research questions will markedly improve the mental health of European citizens and tackle societal challenges. The six research priorities for policy action in mental health and well-being research are:

1. Research into mental disorder prevention, mental health promotion and interventions in children, adolescents and young adults.

2. Focus on the development and causal mechanisms of mental health symptoms, syndromes and well-being across the lifespan (including older populations).

3. Developing and maintaining international and interdisciplinary research networks and shared databases.

4. Developing and implementing better interventions using new scientific and technological advances.

5. Reducing stigma, empowering service users and carers in decisions about mental health research.

6. Health and social systems research that addresses quality of care and takes account of socio-cultural and socio-economic contexts and approaches.

T3-03

Economics and mental health in children and adolescents

Beecham J.

University of Kent and the London School of Economics and Political Science

Economics research in health and social care aims to ask how money can best be spent to improve the health and wellbeing. Evaluative techniques in the economics 'toolkit' can tell us how much a disorder may cost (given current levels of outcomes) now and in the future, how much it may cost to improve outcomes for a particular group of children and adolescents, and whether there are more cost-effective interventions than those currently provided. This is important information for policy-makers, commissioners and providers as they try to meet increasing needs for mental health treatment and support. Unfortunately, although the demand for such information is high, there is a limited supply. For example, there were just 64 papers with any mention of costs research published in English between 2005 and 2012. A few of these papers considered the costs of supporting and treating children with any mental health problems, the main part of the research literature centres around just three disorders; autism spectrum disorder (n=23), attention deficit disorder (n=15) and conduct disorder (n=7). This presentation will bring together what is currently known about the costs of child and adolescent mental health problems, and their prevention and treatment.

T4

Depression in children and adolescents: a developmental perspective

Goodyer I.

University of Cambridge, Department of Psychiatry

Depressive disorders are a collection of mental illnesses that emerge with their highest incident risk rate in the second decade of life. These conditions are aetiologically and clinically heterogeneous. Longitudinal studies of depressed adolescents from cohort and clinical populations demonstrate marked individual differences in outcome into the third decade of life. Randomised clinical trials show that children, adolescent and adults may not be equally sensitive to psychological or pharmacological treatments at least in the weeks following end of treatment.

These observations indicate that age may be an important marker of incident risk and treatment effects. There are also likely to be effects of depressions on the developing adolescent brain. This lecture will discuss the value of taking an age and illness approach to: i) determine the emergence of depressive symptoms in adolescents ii)

reveal the impact of depressive illness and age on the teenage brain iii) identify biomarkers for depression in young people thereby guiding prevention and treatment policy for adolescent mental health.

T5

Obsessive compulsive and related disorders in children and adolescents: innovation and consolidation

Mataix-Cols D.

Child and Adolescent Psychiatry Research Centre Karolinska Institutet

Recognition, assessment and treatment of young people with obsessive compulsive disorder (OCD) and related disorders continues to be a big challenge within health care systems. Although childhood OCD is one of the more common serious mental disorders with prevalence rates of 0.25-3%, it may remain undiagnosed for years. The situation is considerably worse for a group of related disorders, which have received very little attention, particularly in young people. These related conditions include Body Dysmorphic Disorder, Hoarding Disorder, Hair Pulling Disorder and Skin Picking Disorder. OCD and related disorders impair psychosocial functioning and it may produce substantial disability for young people and their families if left untreated. Therefore, early detection and intervention, followed by effective treatments, is essential for young sufferers to minimize distress and secondary handicap. The current recommended treatments for OCD are cognitive behaviour therapy (CBT) and serotonin re-uptake inhibitors (SRIs). Both of these treatments have been validated in randomised controlled trials, and although more evidence is needed, the current consensus is that ideally all young people with OCD should be offered CBT including the technique of exposure and response prevention (ERP). Less is known about the long term outcome and unmet needs of these young patients once they become adults. While most patients respond to available treatments, a substantial number remain unwell or only achieve partial remission. New treatments are currently being tried to improve these outcomes, including memory enhancers (D-Cycloserine) and treatment protocols are being adapted for special populations, e.g. those with comorbid Autism Spectrum Disorders and OCD. Other challenges include ensuring that evidence-based treatments are adequately disseminated to non-specialist clinics, remote geographical areas and ethnic minorities. Tele-care (CBT administered via telephone or the internet) is a promising tool to disseminate these treatments and is currently being evaluated. This lecture will review the current status of research in this area, as well as efforts to disseminating available treatments to reach as many sufferers as possible.

T6-01

Breaking down barriers to access evidence based treatment for young people with OCD

Abstract type: Symposia type B

Thematic area: Clinical Disorders: Other

Authors: Mataix-cols D; Kvale G; Rees C; Lenhard F; Fernandez De La Cruz L

Workplaces: Karolinska Institutet, Sweden; University Of Bergen, Norway; Curtin University, Australia

Symposium registration number 43. breaking down barriers to access evidence based treatment for young people with ocd.

Chair: David Mataix-Cols (david.mataix.cols@ki.se)

Speakers: GerdKvale (Gerd.Kvale@psykp.uib.no), Bjarne Hansen, Clare Rees (C.Rees@curtin.edu.au), Fabian Lenhard (fabian.lenhard@ki.se), Lorena Fernandez de la Cruz (lorena.fernandez.de.la.cruz@ki.se)

Overview: A substantial proportion of children/adolescents with OCD can be successfully treated with either CBT, the first line treatment for young people with the disorder, or medication. Paradoxically, most patients do not have access to such evidence-based treatment. Numerous barriers exist including, but not limited to, lack of trained therapists, geographical barriers, and ethnic/cultural barriers. This symposium will explore current efforts to address some of these issues. Professor Kvale and Dr Hansen (Bergen, Norway) will present the preliminary results of the nation-wide intensive treatment program currently being rolled out in Norway. Professor Rees (Perth, Australia), will present the results of an open trial testing a novel entirely self-guided internet-delivered CBT program for adolescents OCD called OCD? Not Me!. Similarly, Fabian Lenhard (Stockholm, Sweden) will present the results of a pilot trial testing clinician-guided Internet-based CBT for adolescents with OCD and the preliminary results of his ongoing randomized controlled trial. Finally, Dr Fernandez de la Cruz (London, UK and Stockholm, Sweden) will present a series of studies examining ethnic inequalities in access to treatment and treatment outcomes of children and adolescents from ethnic minorities.

T6-01-01

Brief and intensive small-group treatment for adolescents with OCD: preliminary results

Eili N. Riise, Solveig Harila Skjold, Hans Hansen, Gerd Kvale, Bjarne Hansen

Helse Bergen OCD-team, Haukeland University Hospital, Bergen, Norway

Exposure and response prevention (ERP) is recognized as the treatment of choice for adolescents suffering from obsessive-compulsive disorder (OCD). This approach has been delivered successfully in a wide range of formats, with individual treatment delivered over 12–14 sessions as the most common. The Bergen OCD-team has developed a concentrated outpatient group format for adults where individually tailored and therapist assisted ERP is delivered during four consecutive days. The results indicate that nearly 80 % of the patients are recovered 6 months after treatment, and since the intervention is delivered during four concentrated days, the drop-out is basically non-existent. In the current study, the same approach was applied for adolescents. Fifteen consecutively referred OCD-patients (four female) between 11–17 years of age were included. Mean OCD duration was 2 years and 4 months. The treatment was delivered as part of standard outpatient health care and delivered in an intensive format with two patients together in a mini-group. The first day consisted of 3 h of psycho-education, the following 2 days of therapist-assisted ERP (6 h each day), and the last day of 3 h of summarizing and presenting principles for maintenance. Group leaders were highly experienced OCD-therapists. The three following weeks, patients were encouraged to continue to apply ERP-principles and the made daily recordings of OCD-symptoms. CY-BOCS interviews were performed pre, post and 6 months after the treatment in addition to the following rating scales: OCI-R, CDI, COIS, DOC-SF, GAD-7, PHQ9, WEMWBS. FAS and CGAS were employed pre- and post-treatment. The patients were also asked to evaluate several aspects of the treatment to determine the acceptability of this approach to delivering ERP-treatment. All

patients expressed high satisfaction with the treatment. Mean CY-BOCS score pre-treatment was: 28.14 (SD 6.4) and post treatment 8.45 (SD 4.4), which represent highly significant and clinically relevant changes. Data from 3 months follow-up will be presented. Details of the program and complete results will be presented and discussed. The current concentrated and intensive ERP program seems to be a promising treatment format for adolescents with OCD, and replication is recommended.

Keywords: Exposure and response prevention, Adolescents, Group format, Intensive, Obsessive compulsive disorder.

T6-01-02

Self-guided internet-delivered cognitive-behavioural therapy for pediatric obsessive-compulsive disorder: preliminary results from an Australian open trial

A/Prof Clare S. Rees, PhD; Dr Rebecca Anderson, PhD; Amy Finlay-Jones, BA (Hons)

School of Psychology and Speech Pathology, Curtin University, Perth, Australia

Pediatric obsessive-compulsive disorder (OCD) is a significant psychiatric condition, affecting 0.5–2 % of children and adolescents in the community. Internet-delivered cognitive-behaviour therapy (iCBT) has been shown to be an effective and accessible approach to the treatment of a variety of mental health disorders including OCD. However, relatively less is known about the effectiveness of iCBT for paediatric OCD and how much therapist-support is necessary to achieve significant symptom improvement. In this paper we describe the results of an open trial of a completely self-guided iCBT program for pediatric OCD. OCD? Not Me! is a novel, web-based, self-guided cognitive-behavioural intervention designed to treat obsessive-compulsive disorder (OCD) in young people aged 12–18, using the principles of exposure and response prevention (ERP). Funded by the Australian government, this 8 module intervention was developed in 2013 with data being collected from October 2013–June 2015. The characteristics of the young people recruited into the trial will be described, including comorbidity, severity of obsessions and compulsions and symptom outcomes obtained on the primary outcome measure, the Children's Florida Obsessive Compulsive Inventory (C-FOCI). The results of a multi-level mixed effects linear regression will be presented. As this is the first program of its kind to be evaluated, results will be discussed in terms of the feasibility and impact of fully-automated approaches for the treatment of pediatric OCD.

T6-01-03

Therapist-guided, internet-delivered cognitive behavior therapy for adolescents with obsessive-compulsive disorder

Fabian Lenhard, Sarah Vigerland, Erik Andersson, Christian Rück, David Mataix-Cols, Ulrika Thulin, BrjánnLjótsson, Eva Serlachius

Department of Clinical Neuroscience, Centre for Psychiatric Research and Education, Karolinska Institutet, Stockholm, Sweden

Cognitive Behavior Therapy (CBT) is recommended as the first line treatment for pediatric obsessive-compulsive disorder. Yet, a substantial proportion of patients do not have access to treatment.

Internet-delivered CBT (ICBT) has been tested for adults with OCD and has the potential to overcome common treatment barriers, such as geographical distances and lack of trained therapists. Still, ICBT for pediatric OCD is understudied and not available in regular health care.

Our group has developed a novel therapist-guided ICBT program for adolescents with OCD, “BiP OCD”. The treatment is age-appropriate with interactive exercises, animations and frequent therapist contact via the internet platform. In a first pilot study with $N = 21$ adolescents with OCD “BiP OCD” has been shown to be an effective intervention with a large effect size of $d = 2.29$ (95 % CI 1.5–3.07) on the primary outcome measure CY-BOCS and 76 % of patients in remission at 6 month follow-up. Furthermore, a qualitative evaluation of the intervention has been conducted on the acceptability and overall experience of ICBT for young people with OCD.

The “BiP OCD” program will be demonstrated as well as the results from our pilot and qualitative study. The protocol of our ongoing randomized controlled trial will be presented, which includes a smartphone application as an extension of ICBT. Future directions of therapist-guided ICBT for pediatric OCD will be discussed.

T6-01-04

Children from ethnic minorities with obsessive-compulsive disorder: service use inequalities, reasons behind these inequalities, and treatment outcomes

Lorena Fernández de la Cruz, Amita Jassi, Sarah Kolvenbach, Pablo Vidal-Ribas, Marta Llorens, David Mataix-Cols

King’s College London, Institute of Psychiatry, Psychology and Neuroscience, London, UK; Karolinska Institutet, Stockholm, Sweden

Obsessive-compulsive disorder (OCD) has similar prevalence rates across the World. Within western countries, the prevalence of OCD has shown to be roughly consistent across ethnic groups. Given this, a proportional representation of different ethnic groups would be expected in mental health services for OCD. Unfortunately, this does not seem to be the case. We will present the results of a study that explored the ethnic composition of OCD patients referred to secondary and tertiary clinical services in a large mental health trust in South London, relative to the ethnic composition of the corresponding catchment area. These results showed a severe under-representation of OCD patients from ethnic minorities across clinical services. In a second study, the reasons for this disproportion were investigated in a large sample of parents from different ethnic groups, recruited from the general population. Participants completed a survey enquiring about illness perceptions, help-seeking behaviours, causes, and knowledge about OCD. Ethnic differences were found in several of these domains. Overall, the White group presented as the group with more information about the disorder and more prone to seek help if needed. Given the under utilisation of services and the differences in perceptions and attitudes towards the disorder among the ethnic minorities in relation to the White group, we also wanted to explore whether the phenomenology of OCD symptoms was different between White and non-White youths with OCD, and whether empirically validated treatments are also effective for the minority groups. Our results showed that the clinical presentation was remarkably similar in White and non-White patients and that both groups improved similarly with treatment. In the light of these results, the need to facilitate the development of effective strategies and policies for reducing inequalities in accessing evidence based treatment among ethnic minority groups will be discussed.

T6-02

The assessment of adolescents with a borderline personality disorder: how to assess and what for

M. Speranza, M. Kaess, M. Debbané, K. Schmeck

University of Versailles, France; University of Heidelberg, Heidelberg, Germany; University of Geneva, Geneva, Switzerland; Psychiatric University Hospitals (UPK), Basel, Switzerland

The assessment of adolescents with borderline personality disorder: how to assess and what for the diagnosis of borderline personality disorder (BPD) in adolescents has been a topic of debate in recent years, with controversial reports concerning its validity and its stability over time. Despite long-standing agreement that personality disorders have their roots in childhood and adolescence, clinicians have been overall reluctant to diagnose personality disorders during this age period, as adolescents are undergoing fast-changing developmental processes. However, although to date there are no official developmentally focused criteria for BPD, the new DSM-5 classification implies that personality disorder categories (including BPD) can be applied to children and young people in cases where the maladaptive personality traits appear to be pervasive and persistent, and are considered unlikely to be limited to a particular developmental stage. In line with this, several national treatment guidelines acknowledge that diagnosing BPD is now justified and practical in adolescence. Reliable diagnosis of BPD is essential and the use of well-established interview tools is highly recommended.

The aim of the symposium is to present an update of the current diagnosis and assessment of Borderline Personality Disorders in adolescence with the perspective of integrating several ways of approaching BPD in adolescence in terms of categorical and dimensional diagnosis, but also in terms of specific aspects of personality features and functioning that may be central to develop treatment plans and follow changes during therapy.

Chair: Mario Speranza

Co-Chair: Michael Kaess
Communications

French validation of the Mac Lean Screening Instrument for Borderline Personality Disorders (MSI-BPD) in adolescence

Mario Speranza, Alexandra Pham-Scottet, Lionel Cailhol, Fernando Perez-Diaz, Julien-Daniel Guelfi, Maurice Corcos and EURNET-BPD (European Research Network on Borderline Personality Disorder)

Department of Child and Adolescent Psychiatry, University of Versailles, France

Assessment of adolescent risk-taking and self-harm behaviour and its predictive value for borderline personality disorder

Michael Kaess, Peter Parzer, Gloria Fischer, Franz Resch, Romain Brunner

Department of Child and Adolescent Psychiatry, University of Heidelberg, Germany

The assessment of reflective functioning in emerging borderline personality disorder

Martin Debbané, Deborah Badoud

Developmental Clinical Psychology Research Unit, Faculty of Psychology and Educational Sciences, University of Geneva, Switzerland

The assessment of identity development of BPD adolescents

Klaus Schmeck

Child and Adolescent Psychiatric Hospital, Psychiatric University Hospitals (UPK) Basel, Switzerland

T6-02-01**French validation of the Mac Lean screening instrument for borderline personality disorders (MSI-BPD) in adolescence**

Mario Speranza¹, Alexandra Pham-Scottet^{2,3}, Lionel Cailhol⁴, Fernando Perez-Diaz⁵, Julien-Daniel Guelfi^{1,2}, Maurice Corcos^{3,6}, EURNET-BPD (European Research Network on Borderline Personality Disorder)

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Background: The Mac Lean Screening Instrument for Borderline Personality Disorders (MSI-BPD) is a 10-items self-questionnaire developed by Mary Zanarini to allow a reliable and rapid screening of Borderline Personality Disorders (BPD) according to DSM-IV-R criteria. Several translations (Finnish, German) already exist. With the agreement of the author, we have proceeded to the translation and validation of a French version of the MSI-BPD.

Methods: Subjects were issued from the European Research Network on Borderline Personality (EURNET BPD), a European research project investigating the phenomenology of BPD in adolescence. 146 subjects were included in the study and fulfilled the French version of the MSI-BPD: 64 consultant or inpatient adolescents or young adults presenting a diagnosis of BPD according to the Structured Interview for DSM-IV Personality Disorders and 82 matched control subjects without any personality disorder (mean age of 16.3, SD 1.4; 13 % of men and 87 % of women).

Results: The acceptability of the MSI-BPD self-questionnaire was satisfactory, the time of filling of less than 5 min. The mean score of the MSI-BPD for the BPD group was of 7.02 (SD = 2.0), the mean score for the control group was of 1.99 (SD = 2.2). According to a Receiver Operator Curve (ROC), a cut-off score of 5 could be considered as the best one associating a sensitivity of .80, a specificity of .85, a positive predictive value of 85.76 %, and a negative predictive value of 79.22 %.

Discussion: The sensitivity, specificity, positive and negative predictive values of the MSI-BPD in this sample were comparable to those of the validation study of the original version of the instrument (sensitivity = 0.81; specificity = 0.85). However, the cut-off of our sample was lower (5) than the cut-offs of the original sample (7) and of the translated versions. The French version of the MSI-BPD is currently under examination in a larger sample of adult BPD subjects.

Conclusions: The MSI-BPD is a simple and rapid screening instrument for Borderline Personality Disorders, currently available for French speaking countries. The potential applications of the MSI-BPD in clinical and not clinical samples are important.

T6-02-02**Assessment of adolescent risk-taking and self-harm behaviour and its predictive value for borderline personality disorder**

Michael Kaess¹, Peter Parzer, Gloria Fischer, Franz Resch, Romuald Brunner

Department of Child and Adolescent Psychiatry, University of Heidelberg, Germany

Background: Both suicidal and nonsuicidal self-injury are core features of borderline personality disorder (BPD) particularly among adolescents. In addition, adolescent with BPD tend to engage in multiple other risk-taking behaviours such as substance abuse, pathological internet use and sexual risk-behaviour. However, these behaviours are also common among non-clinical adolescents. The talk will discuss if and how adolescent risk-taking and self-harm behaviour does indicate the development of BPD.

Methods: The talk will give an overview over different forms and manifestations of adolescent risk-taking and self-harm behaviour as well as its assessment. The talk will then present data from large-scale epidemiological adolescent samples, longitudinal population-based data and clinical adolescent psychiatric data.

Results: Adolescent risk- and self-harm behaviour is common among European adolescents. However, there is evidence that it can be used as an indicator of psychopathological deterioration depending on its frequency, severity and course. Particularly, severe forms of adolescent risk-taking and self-harm behaviour are associated with the development of BPD. Symptoms shifts are common and require attention.

Discussion: Adolescent risk-taking and self-harm behaviour should be acknowledged as a potential early indicator of risk, particularly for the development of BPD. Thus, such behaviour warrants a thorough assessment targeting comorbid personality pathology.

T6-02-03**The assessment of reflective functioning in emerging borderline personality disorder**

Martin Debbané^{1,2,3}, Deborah Badoud^{1,2}

¹Developmental Clinical Psychology Research Unit, Faculty of Psychology and Educational Sciences, University of Geneva, Switzerland; ²Office Médico-Pédagogique Research Unit, Department of Psychiatry, University of Geneva School of Medicine, Switzerland; ³Research Department of Clinical, Educational and Health Psychology, University College London, UK

Abstract: Reflective functioning (RF) relates to one's capacity to understand human actions and behaviors in terms of cognitive and affective mental states. RF can further be conceptualized as a general protective factor working against the onset of psychopathological states. From a developmental standpoint, adolescence is understood as a critical period of maturation in RF; thwarted development of RF is thought to contribute to the emergence of Borderline Personality Disorders (BPD). This presentation proposes to review recent studies investigating the developmental relationship between RF and emerging BPD psychopathology in youths, and present original findings linking RF to self-injurious behaviors in adolescents. The usage of both clinical and empirical tools to assess RF in youths will be discussed. Finally, we propose to explore how the measurement of RF may meaningfully complement clinical evaluation protocols as well as scientific inquiries on developmental psychopathology.

T6-02-04**The assessment of identity development of BPD adolescents**

Klaus Schmeck¹, Susanne Schlüter-Müller¹, Kirstin Goth¹

¹Psychiatric University Hospitals, Basel, Switzerland

Objective: In the alternative model of personality disorders in the Diagnostic and Statistical Manual DSM-5 the construct "Identity"

has been integrated as a central diagnostic criterion. Disturbance of Identity is listed as one of the main criteria of Borderline Personality Disorder. On the basis of psychodynamic and social-cognitive theories, we developed the 58 item self-report inventory AIDA (Assessment of Identity Development in Adolescence) to assess identity development in healthy and disturbed adolescents.

Methods: The psychometric properties of AIDA were studied in a sample of 357 adolescents (46.2 % boys, 53.8 % girls; age range 12–18, mean age 15.08, SD 1.99) from a school sample (N = 305) and a clinical sample (N = 52) of juvenile inpatients and outpatients with the diagnoses of personality disorders (N = 20) or other mental disorders (N = 32). Scale reliability was analyzed with Cronbach's alpha, content validity by correlations of AIDA with JTIC (Junior Temperament and Character Inventory) and criterion related validity by differences in identity development between adolescents with personality disorders (N = 20), other mental disorders or no disorder.

Results: Reliability of AIDA Total Score ($\alpha = 0.94$) and Subscale Scores (Continuity: $\alpha = 0.86$; Coherence: $\alpha = 0.92$) were very good. In line with theory, the JTIC character dimension Self-Directedness, an indicator of self-related impaired personality functioning, correlated highly negative with the levels of Identity Discontinuity and Incoherence measured by AIDA. Both AIDA scales differentiated significantly between PD-patients and controls with remarkable effect sizes (d) of 2.17 and 1.94.

Conclusion: AIDA provides an economic, reliable and valid assessment of normal and disturbed identity development in adolescence and can be used as screening instrument to detect early starting personality disorders.

T6-03

Special needs in diagnosis and treatment of eating disorders in childhood and adolescence

A. Van Elburg, B. Herpertz-dahlmann, U. Schmidt, J. Castro-fornieles

University Medical Center Utrecht, Utrecht, The Netherlands; University Clinics RWTH Aachen, Aachen, Germany; Institute of Psychiatry, Psychology and Neuroscience, King's College, London, UK; Neurosciences Institute, Hospital Clinic of Barcelona, Barcelona, Spain

This symposium will present several important issues that especially apply to eating disorders in young age.

Annemarie von Elburg, Utrecht, The Netherlands, will report on translational research in childhood and adolescent eating disorders. She will present findings from the Utrecht Research Group Eating disorders and demonstrate how findings from animal models, such as activity-based anorexia in rats, may be translated into new treatment approaches in patients.

Ulrike Schmidt, Kings College London, will present recent findings to psychosocial and biological risk factors for the development and for different illness trajectories in relation to binge eating and bulimic disorders in young people, based on the European IMAGEN cohort of over 2000 adolescents. Against the background of available prevention and treatment studies for binge eating and bulimic disorders in young people, the implications of these findings for designing novel interventions for treatment and prevention of eating disorders will be discussed.

Beate Herpertz-Dahlmann, Aachen, Germany, will present the findings of a 2.5-year follow-up study on the comparison of inpatient and day patient treatment in adolescent anorexia nervosa. By means of an RCT 172 patients with AN were randomly assigned to either inpatient or day patient treatment. While at the 1-year follow-up day patient treatment was not inferior to inpatient treatment, day patient treatment was superior at 2.5 year follow-up with respect to body weight and less readmissions to hospital. The underlying causes for

the better outcome of day patient treatment and its implication for the health care system will be addressed.

Josefina Castro-Fornieles, Barcelona, Spain, will present the results of a long-term follow-up study in adolescent AN. Of 82 patients with a mean age of 13.6 years treated at the department for Child and Adolescent Psychiatry in Barcelona 20 years ago, 29 could be reassessed. 62 % had recovered from their eating disorder, 24 % had atypical and another 14 % chronic AN. In the subsample of patients with chronic AN 73 % had at least one additional psychiatric disorder, while there were no significant differences in prevalence of psychiatric morbidity in the comparison group of healthy controls and the recovered group.

T6-03-01

Bulimic symptoms and disorders in young people: risk factors, prevention and treatment

Ulrike Schmidt

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Keywords: Bulimia nervosa, Risk, Prevention.

Bulimic symptoms (including body dissatisfaction, loss-of-control eating, unhealthy compensatory behaviours, such as laxative use and self-induced vomiting) are relatively common in young people. They are precursors to full-syndrome eating disorders and are risk factors for later depression, health risk behaviours (e.g. smoking, risky sexual behaviour), and obesity. Much progress has been made in delineating psychosocial risk factors for the emergence of bulimic symptoms, e.g. in relation to the importance of peer-influences. However, the precise nature and direction of these influences remains to be determined. For example, it is not known whether peer influence (individuals' attitudes and behaviours becoming more similar to their peers' over time) or peer selection (adolescents affiliating with peers that share similar characteristics) is more prominent.

In contrast, (neuro)biological risk factors of bulimic symptoms are much less well understood. Little is known about genetic and neural risk factors of bulimic behaviours. In addition, little is known about how these factors interact in young people's illness trajectories and what determines persistence or early resolution of symptoms.

In this presentation I will present recent work from our group on psychosocial and biological risk factors for the development and for different illness trajectories in relation to binge eating and bulimic disorders in young people, based e.g. on the European IMAGEN cohort of over 2000 adolescents. Against the background of the available evidence on prevention and treatment for binge eating and bulimic disorders in young people, I will discuss the implications of these findings for designing novel interventions for prevention and treatment of eating disorders.

T6-03-02

Adolescent-onset anorexia nervosa: changes in diagnoses and long term outcome

Josefina Castro-Fornieles, Teresa Plana, Miguel Garriz, Elena Moreno, Sonia Romero, Susana Andrés-Perpiñá

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Background: Long-term outcome in anorexia nervosa (AN) shows the difficulties of achieving a complete recovery (Steinhausen, 2002).

Studies with adolescent samples tend to report better outcome results, but there are few studies focusing specifically in adolescent-onset AN (Herpertz-Dahlmann et al., 2001; Wentz et al., 2009). Besides the problem of mortality or chronicity, the study of changes in eating disorder (ED) diagnosis and of comorbidity from baseline to follow-up assessments is also a relevant issue in young patients. Method: We carried out a study to determine the current condition of patients treated in our department 20 years ago when they were adolescents (mean age 13.6, SD 1.5) and fulfilled criteria for AN. From 82 female patients treated during that period, 48 were located but 17 reject to collaborate. One patient was already deceased (due to complications of malnutrition) and 1 was institutionalized. Finally, 29 patients were included in the follow-up assessment (mean age 36.3, SD = 4.2) and compared with a control group of 30 non-ED females (mean age 36.5, SD = 2.9). They were assessed with the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I), the Eating Disorder Examination (EDE) and the Eating Disorders Inventory-2 (EDI-2). Results: Among the previous 29 AN patients, 18 (62.1 %) did not have any ED, 7 (4.1 %) had Atypical AN, 2 (6.9 %) had Extreme AN and 2 (6.9 %) Moderate AN. During the years until follow-up assessment they had had different ED diagnosis. Among the 18 patients who were recovered, only 4 (22.2 %) had a diagnosis of anxiety disorder. In the group of patients currently with an ED, 8 (72.7 %) of them had at least other psychiatric diagnosis. Four presented comorbidity with one disorder (2 cases of anxiety disorder, 1 dysthymia and 1 bipolar disorder), three patients with 2 disorders (1 case with 2 anxiety disorders, other with an OCD and depressive disorder and another with a depressive and anxiety disorders). One patient had comorbidity with 3 disorders (schizoaffective disorder, OCD and substance abuse). Differences between recovered AN patients and controls in the different subscales of the EDI and the EDI-2 were not statistically significant but the group of non-recovered patients had significant differences both with controls and with recovered patients. Conclusions: Even if a quite large percentage of adolescent-onset AN patients have a good long term outcome, a subgroup of them have a poor prognosis both with chronic ED and comorbid psychiatric disorder.

T6-03-03

Day patient treatment is superior to inpatient treatment after 2.5 years—results of a 2.5 year follow-up-study in 170 patients

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Day patient treatment (DP) is superior to inpatient treatment (IP) in adolescent anorexia nervosa (AN): results of the 2.5 year follow-up of a multicenter RCT trial in 172 patients.

Introduction: Guidelines of several European countries and the US consider IP as the treatment of choice for moderately to severely ill adolescent patients with AN, but it is costly and relapse rates are high. DP is less expensive and may avoid relapse by easing the transition from hospital to home.

Methods: Multicenter, randomized, open-label trial with 11–18 year old participants from six centers in Germany with first admission to hospital for AN. After 3 weeks of inpatient care patients were randomly assigned to either IP or DP with an identical treatment program in both settings. The primary outcome was the increase in BMI between admission and 12-month follow-up and between admission and 2.5 years follow-up.

Results: 172 adolescent patients were randomized to either treatment arm; 161 (94 %) were followed up after 12 months, 143 (83 %) after 2.5 years. At the 12-month follow-up DP was not inferior to IP. At the 2.5 year follow-up DP was significantly superior to IP with regard to BMI and was followed by significantly less rehospitalisations. In addition DP was less costly than IP and psychosexual development, an important outcome predictor, was better in DP patients.

Conclusions: After 1 year DP was not less effective than IP; after 2.5 years it was superior to DP for weight restoration and maintenance and number of rehospitalisations. Thus, in the longer term DP is a safe, less costly and probably more effective alternative to IP. Characteristics of patients, who are doing better in either DP or IP, are described.

T6-03-04

From bench to bedside: translational research in eating disorders

Annemarie van Elburg

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Translational research aims to translate findings from the laboratory to the patient's bedside. The Utrecht Research Group Eating disorders (URGE) focuses on this type of research in eating disorders. In this lecture, practical examples will be given on how findings from experiments e.g. in an animal anorexia model have been translated into new treatment approaches in patients.

T6-04

Early intervention in child and adolescent psychosis

M. Hodes, B. Schimmelmann, M. Dominguez, S. Iizuka

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Symposium Convenor:

Matthew Hodes

Institutional Affiliation of Symposium Convenor:

Imperial College London.

Symposium Summary:

Over the last two decades, substantial work has been carried out into early intervention for psychosis in young people. The aim is to provide timely and effectively intervention with a view reducing

duration of untreated psychosis, and improving outcomes. This symposium addresses the linked themes of: early intervention for young people at risk and clinical experiences of early detection for psychosis from Bern (Schimmelmann); pathways to care for young people with psychosis, and the differences between adolescents and adults, in early intervention services in London (Dominguez); a review of antipsychotic medication discontinuation in children and adolescents with psychosis, drawing on publishing trials (Iizuka).

Keywords: Child and adolescent psychosis, Early intervention, Pathways, Medication discontinuation.

T6-04-01 Early detection of psychosis in children and adolescents

B. G. Schimmelmann

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Over the last two decades, much progress in the early detection of psychosis has been achieved. Two sets of at-risk criteria prevail, the ultra high-risk (UHR) and the basic symptom (BS) criteria. While differences between early-onset and adult-onset psychoses have frequently been pointed out, developmental aspects of current at-risk criteria used for the early detection of psychosis, are rarely considered. The presentation will outline (i) indications of developmental particularities of current at-risk criteria in the general population (the Bern At Risk Study in Kids, BEAR-KID) and the help-seeking population of children and adolescents, and (ii) clinical experiences in the early detection of psychosis in children and adolescents (aged 8 to 17 years) derived from the Berne Early Detection and Intervention Service (FETZ-Bern).

Keywords: At-risk, Early detection, Psychosis.

T6-04-02 The influence of family factors in shaping pathways to care in first episode psychosis in adolescents

**Maria-de-Gracia Dominguez¹, Helen L. Fisher², Sonia Johnson³, Matthew Hodes¹, on behalf of the MiData Consortium*

* Presenter: Dr Maria-de-Gracia Dominguez

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Introduction: Adequate pathways to care are a prerequisite for early detection and intervention in First Episode Psychosis (FEP). Two systematic reviews examined the influence of ethnicity, social and clinical factors on psychosis care pathways. Accessibility to health services differs for under 18s, yet differences in care pathways between age groups and the impact of family factors have not been investigated.

Objectives: To investigate the influence of family factors in help-seeking pathways for adolescents with FEP.

Method: Naturalistic cross-sectional study of 1351 FEP (14–35 years) referred to Early Intervention Psychosis teams (London, UK; 2003–2009). Care pathways included accounts on who initiated help-

seeking process, initial contact points (GP, emergency services, education, social services, police and court/prison), and family factors (social support, living arrangements and family load of mental illness).

Results: For the majority of adolescents ($n = 118$) and adults ($n = 1232$), first and second contact points were GP (30 vs 42 %) and emergency services (18 vs 23 %). However, these two services accounted for less than half of the adolescents' sample. Educational services were more likely to refer adolescents than adults ($p < 0.001$). Family factors, such as good social support ($p = 0.036$), living with carers ($p < 0.001$) and family load of mental illness ($p = 0.018$), were associated with family taking a leading role in problem recognition.

Conclusions: Adolescents with psychosis differ from adults in their contact points when seeking help. Problem recognition is a complex process which involves identifying and legitimizing mental health concerns. Parental awareness, perception of problems and family support revealed as a key step in seeking help for adolescents.

Keywords: Pathways to care, First Episode Psychosis, Adolescents, Early detection, Health Services.

T6-04-03 A review of antipsychotic treatment discontinuation in psychosis in children and adolescents

*Dr Sarah Iizuka^{*1}, Dr Matthew Hodes²*

* Presenter: Dr Sarah Iizuka

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Background: In children and adolescents with psychosis, effective and timely treatment reduces distress and may improve outcomes. Antipsychotic medication adherence and discontinuation are of great importance. Some reports suggest a high rate of treatment discontinuation, but the subject to our knowledge has not previously been reviewed. The aim of the study is to systematically review treatment completion and discontinuation in studies of psychosis in children and adolescents.

Method: A review of published treatment trials of psychosis in children and adolescents, using the databases Psycinfo/Medline/Embase/CINAHL/Google Scholar. Inclusion criteria were as follows; All published trials from 1980 to present, in which a viable drug treatment for psychosis was investigated, participants age < 18 (or e.g. mean age < 18) and adequate data available on treatment completion/discontinuation.

Results: 24 papers were identified as meeting the inclusion criteria. These papers were categorized into trials studying affective psychoses, non-affective psychoses (Psychosis NOS, Schizophrenia, Schizophreniform disorder, Schizoaffective disorder, Delusional disorder) and mixed disorders. 15 of these papers were for non-affective psychoses, 7 of which were open label trials and 8 randomised trials. Of the 24 papers identified, 15 studies (63 %) described significant numbers of patients who did not agree to start in treatment discontinuation was found to be higher the longer the length of the trial (18 % at 6 weeks, compared with 74 % at 44 weeks). The most common cause for treatment discontinuation in all studies were; (1) Lack of efficacy 30 %, (2) Withdrawal of consent 24 %, (3) Side effects related 21 %.

Conclusion: This review points to a high level of treatment discontinuation in psychosis in children and adolescents, which increases with the length of the study trial. This reflects the pattern of treatment

adherence and discontinuation in the community studies. Further research is needed to look into the reasons for discontinuation and interventions to improve adherence in this age group.

Keywords: Adherence, Antipsychotic medication, Discontinuation, Psychosis, Treatment.

T6-05

Adolescent forensic research in Europe II. An EFCAP symposium

R. Barroso, S. Oshukova, C. Van Nieuwenhuizen, R. Kaltiala-Heino

University of Trás-os-montes and Alto Douro, Vila Real, Portugal; Helsinki University Hospital, Helsinki, Finland; Tilburg University, Tilburg, The Netherlands; Tampere University Hospital, Tampere, Finland

Overview and speakers:

The relationship between self-rated psychopathic traits and psychopathology in a sample of Finnish non-referred adolescents. Dr Svetlana Oshukova, Helsinki University Hospital and University of Helsinki, Finland.

Behavioral effects of neurofeedback in adolescents with ADHD: A Randomized Controlled Trial. Professor Dr. Chijs van Nieuwenhuizen, Tilburg University, Scientific Center for Care and Welfare (Tranzo), and GGzE Center for child and adolescent psychiatry.

Risk factors for violent and disruptive behaviours in adolescent institutionalized care. Professor Riittakerttu Kaltiala-Heino, University of Tampere and Tampere University Hospital, Finland.

Characteristics and Specificities of Juvenile Sexual Offenders. Professor Ricardo Barroso, Department of Psychology, University of Trás-os-Montes and Alto Douro (Portugal), and Faculty of Psychology, University of Porto, Portugal.

T6-05-01

The relationship between self-rated psychopathic traits and psychopathology in a sample of Finnish non-referred adolescents

A constellation of shallow affect, lack of empathy, remorse or guilt, failure to accept responsibility for own actions, superficial charm, grandiose sense of self-worth and manipulation are called psychopathic character traits. In clinical samples, psychopathic traits have been associated with severe psychosocial problems. Less is known about the relationship between psychopathic traits and behavioral and emotional functioning in non-referred adolescents.

The aim of the study was to investigate the relationship between self-rated psychopathic traits and psychopathology in a sample of Finnish non-referred adolescents.

The sample comprised all 15- to 16-year-old Finnish-speaking adolescents attending the 9th grade at secondary schools in the city of Kokkola, Finland, in January 2014. The Youth Psychopathic Traits Inventory (YPI) and The Youth Self Report (YSR) were used to assess self-rated psychopathic traits and emotional and behavioral functioning of the respondents.

On the YPI boys scored significantly higher in total scores as well as in Interpersonal and Affective dimension scores than girls did. There were no significant gender differences in scores for the Behavioral dimension.

Girls scored significantly higher than boys on the total score, on the internalizing scale and on most of the syndrome scales of the YSR.

There was no difference between boys and girls on the aggression, rule-breaking behavior and overall externalizing scale scores.

The externalizing broadband scale of the YSR and corresponding syndrome scales (aggression and rule-breaking behavior) showed high correlations with the YPI scores, especially with the behavioral dimension and the total score. The attention problems in both genders were at least moderately correlated with behavioral dimension of the YPI.

We found no high correlations between the YSR internalizing scale and the YPI structure elements. The attention problems in both gender were at least moderately correlated with behavioral dimension of the YPI.

The results indicate that self-rated aggressive and rule-breaking behavior is strongly associated with core psychopathy personality traits in non-referred youth. While both the YPI and YSR scores revealed gender differences, boys and girls scored almost equally on the YPI Behavior dimension, as well as on the YSR externalizing scale and its subscales—the area where correlations between questionnaires scores were most expressive.

Keywords: Psychopathic traits, Delinquency, Aggression.

Authors:

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Keywords: Psychopathic traits, Callous-unemotional traits, Adolescence.

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T6-05-02

Behavioral effects of neurofeedback in adolescents with ADHD: a randomized controlled trial

Prof. Dr. Chijs van Nieuwenhuizen^{1,2}, Dr. Marleen Bink³, Dr. Arne Popma⁴, Dr. Ilja L. Bongers, PhD², Dr. Geert J. M. van Boxtel, PhD⁵

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Neurofeedback has been proposed as a potentially effective intervention for reducing Attention Deficit Hyperactivity Disorder (ADHD) symptoms. It remains unclear however whether neurofeedback is of additional value to treatment as usual (TAU) for adolescents with clinical ADHD symptoms. The aim of the current study was to investigate the additional value of neurofeedback over treatment as usual (TAU) for adolescents diagnosed with ADHD and comorbid disorders aiming specifically at the behavioural aspects. It was expected that behavioral measures of attention would improve more in the group that received neurofeedback (in addition to TAU) than the group that received TAU-only.

Using a multicenter parallel-randomized controlled trial design, adolescents with ADHD symptoms were randomized to receive either a combination of TAU and neurofeedback (NFB + TAU, $n = 45$) or TAU-only ($n = 26$). Neurofeedback treatment consisted of approximately 37 sessions of theta/sensorimotor rhythm (SMR)-training on the vertex (Cz). Primary behavioral outcome measures included the ADHD-rating scale, Youth Self Report, and Child Behavior Checklist all assessed pre- and post-intervention. Results showed that the behavioral problems decreased equally for both groups with medium to large effect sizes, range partial $\eta^2 = 0.08$ to 0.31 , $p < 0.05$. On the behavioral outcome measures, the combination of neurofeedback and TAU was as effective as TAU-only for adolescents with ADHD symptoms. Considering the absence of additional behavioral effects in the current study, it is questionable whether theta/SMR neurofeedback for adolescents with ADHD and comorbid disorders in clinical practice should be used. Further research is warranted to investigate possible working mechanisms and (long-term) specific treatment effects of neurofeedback.

Keywords: Neurofeedback, theta/SMR-training, ADHD, RCT.

T6-05-03

Risk factors for violent and disruptive behaviours in adolescent institutionalized care

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Abstract: Aggression and violence are a severe challenge in child and adolescent psychiatric treatment settings, with incidences of aggressive behaviours ranging from 0.4–3.5 incidents per unit per day between treatment settings. As a means to ensure safety of institutionalised youth, and staff, and to enhance the therapeutic milieu, we need to know more about the nature of behaviours and on their relation to individual aspects of youth treated in these units. The study comprised a cross-sectional data review of 231 adolescents in three different institutional care settings as well as a semi structured follow-

up during the first 180 days of treatment. Across three different levels of care, only a small part of the adolescents performed a majority of all violent and severe disruptive incidents. Schizophrenia spectrum diagnoses and female sex were associated with increased number of incidents of violence towards others, self-harm and non-violent disruptive behaviours. Younger adolescents displayed more violent and disruptive behaviours and older adolescent more incidents of self-harm. Unlike in the population at large, among institutionalized adolescents, girls display the most events of violence towards others. Violent and disruptive behaviours in institutions are associated with more severe psychopathology.

Keywords: Violence, Self-harm, Disruptive behaviours, Institutionalized care.

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T6-05-04

Characteristics and specificities of juvenile sexual offenders

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Abstract

Aims and hypothesis: Studying the characteristics of young sex offenders, trying to determine the differences between juvenile sexual offenders and juvenile non-sex offenders.

Background: The study of juvenile sexual violence has been attracting the attention of the mental health services, juvenile justice and public policy, as well as researchers. Theoretically, there are two perspectives explaining the occurrence of sexual offences committed by adolescents. The generalist perspective suggests that sexual crimes committed by juveniles are a manifestation of general delinquency, where sexual assaults are only part of adolescent antisocial behaviour. The second approach, called specialist perspective, believes that young sex offenders differ from other juvenile's aggressors, arguing that there are different explanations for the sexual assaults compared to other assaults offenders. This research consists of five studies, aimed at obtaining results that could contribute to the international discussion about which theoretical position seems to be the most appropriate way of explaining the behaviour of sexually aggressive young minors.

Methods: For this purpose, we used a sample of 118 adolescent sexual offenders (61 rapists and 57 child sex abusers). Comparative analyzes were performed with 112 young nonsexual offenders and 98 non-offenders on a set of dimensions (demographic, typological, criminal, behaviour problems, antisocial tendencies, family characteristics, social and community and sexual interests). Results: The results showed some differentiating characteristics of rapists from child sexual abusers. We also found similar characteristics among young sex offenders and adolescent non-sex offenders, suggesting that in some dimensions they are generically similar. The exception seems to be centered on sexuality-related variables (knowledge and atypical sexual interests).

Conclusions: The implications of these results are discussed in light of assessment concerning risk to reoffend and recommendations for the treatment and prevention of juvenile sexual offences.

Keywords: Juvenile sex offenders, Risk factors.

T6-06-01

Bariatric surgery in severe adolescent obesity: a retrospective study of 35 clinical observations

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Childhood obesity is a growing importance phenomenon in France and around the world. An obese child often remains so in adulthood and epidemiological studies connect obesity and premature mortality in adults by 50 to 80 %. The care of obese subjects, from the first signs, improves both short and long term results by preventing the development of comorbidities and therefore constitutes a priority. However, the results of medical treatment of childhood obesity are disappointing. Given this situation, surgical treatment, which has become a treatment of choice for severe obesity in adults, is now contemplated for severe and resistant obesity in adolescents.

In the United States, the first young patients were operated in 1993. In France, this approach is still new and innovative in this age group. However, under specific indications and in the context of a multidisciplinary monitoring involving dieticians, surgeons, child psychiatrists, bariatric surgery adolescent appears justified in the literature.

Since 2009, pediatrics and child psychiatrics team of the University Hospital of Angers offer a multidisciplinary innovative support in addition to the conventional medical approach leading to the possibility of bariatric surgery by gastric banding under specific indications. The authors retrospectively studied the epidemiology and psychopathology of these obese adolescents candidate to surgery in the University Center since the beginning of the “obesity network”. The network organisation and the study results will be presented. We will discuss the management of these young patients in their psychic and somatic healthcare circuit before and after surgery, questioning firstly the place and development of obesity related to the presence of environmental predisposing factors. Secondly we will talk about the psychic effects of weight loss and/or disappearance of alimentary symptoms such as binge eating disorder after a gastric banding surgery.

T6-06-02

Behavioral weight-loss treatment in children and adolescents: potentials and limitations

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Weight-loss treatment in children and adolescents: systematic review of potentials and limitations of behavioral lifestyle interventions

Background: In Europe, prevalence rates for overweight and obesity in children and adolescents have plateaued at a high level. Due to the elevated risk of long-lasting somatic and psychiatric comorbidities,

effective interventions to treat obesity are in frequent demand. Weight loss treatment has been shown to be effective, yet the overall outcome concerning weight status has not been sufficiently highlighted. The objectives of this review were a literature update and the deduction of clinical implications.

Methods: A systematic literature research was performed for studies published between May 2008 (terminating date of a 2009 Cochrane review) and December 2013 in the medical database Medline via PubMed. Studies were assessed on the basis of defined inclusion criteria and relevant criteria for methodological quality.

Results: 48 randomized controlled trials with a total of 5025 participants were identified and evaluated. With regard to eligible studies fulfilling predefined methodological quality criteria, weight losses between 0.05 and 0.42 BMI z-score within 24 months after starting conservative treatment were reported. 41 studies included data on dropout rates before the end of the intervention period. Dropout rates were 10 % or higher in 27 studies (66 %) and 25 % or higher in 9 studies (22 %).

Conclusion: Based on consistent evidence, treatment seeking children and adolescents and their families should be informed about the limited effect of conservative obesity treatment on weight status. The investigation of predictors for treatment success and the evaluation of additional treatments focusing on coping with obesity warrant future research.

Reference: Mühlig Y, Wabitsch M, Moss A, Hebebrand J (2014) Weight loss in children and adolescents—a systematic review and evaluation of conservative, non-pharmacological obesity treatment programs. *Dtsch Arztebl Int* 111:818–24

T6-06-03

Anorexia nervosa in adolescent girls, parental psychological states and marital tensions

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Background: Anorexia is an eating disorder that generally affects adolescents, triggering severe relational imbalance to the family. The emotional functioning of families with an anorexic adolescent remains still little known, despite the pivotal role that families play in the evolution of the disorder. Therapies are more and more oriented not only to the adolescents but to the family as well, since the study of family dynamics suggests that specific family dysfunctional patterns contribute to the development and maintenance of eating disorder.

Aim: To study the presence of psychopathological traits and dyadic interactions in couples of parents of adolescent girls with anorexia nervosa and their possible correlations with the daughters' clinical and psychopathological features.

Methods: Forty-two girls, aged 13–17, who fulfilled the DSM-IV-TR diagnostic criteria for AN and their parental couples were enrolled. Forty-two age-matched girls with no psychiatric disorders and their parental couples entered the study as controls. All the girls enrolled filled in the EDI-3 and the CDI, to disclose depressive traits. The parents were asked to fill in the Dyadic Adjustment Scale (DAS), to explore the relationship satisfaction of the couple through 4-relational dimensions (Dyadic Consensus, Dyadic Satisfaction, Dyadic Cohesion and Affective Expression) and the Beck Depression Inventory-II (BDI-II) to assess depressive symptoms.

Results: Parents of AN subjects showed lower scores at the subscale of “dyadic consensus”, at the DAS, indicating a lower degree of agreement concerning matters of daily-life and socialization, and at the DAS total scale, compared to controls.

At the BDI-II, both fathers and mothers of AN subjects showed significantly higher scores at the cognitive, affective and total scales, compared to the parents of healthy subjects. Moreover, when considering BDI cut-off score, a higher number of mothers and fathers of subjects with AN presented depressive traits at the BDI, when compared to controls.

Moreover, some aspects related to the parental features might be considered as risk factors for the presence of AN in their daughters. In particular, mothers’ low degree of “Dyadic Consensus” at the DAS scale, higher scores at fathers’ BDI-II in both the cognitive scale and higher scores at the mothers’ BDI-II somatic-affective scale were associated with the presence of AN in the daughters.

Discussion: Dyadic adjustment and depressive symptoms in parental couples of AN girls seem to be connected with specific risk factors that may trigger anorexia and should be considered in the treatment of adolescent girls with anorexia nervosa.

T7-01 Epigenetic, autoimmune and environmental aspects of pediatric OCD and related disorders

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Chairs: Profs Mataix-Cols and Hoekstra

Speakers: Dr Edna Grünblatt (edna.gruenblatt@kjpdzh.ch), Dr Astrid Morer (amorer@clinic.ub.es), Dr Ana Perez-Vigil (APEREZV@clinic.ub.es), Prof Hoekstra

Overview: Obsessive–Compulsive Disorder (OCD) and Related Disorders, including Chronic Tic Disorders, are a group of common, disabling, heritable and often-chronic mental illnesses that start early in life and tend to have life-long adverse consequences. Evidence-based treatment is limited and these treatments are only partially successful, particularly if delayed. Despite dedicated research and some breakthroughs in the scientific understanding of relevant neurobiological and psychosocial factors, the causes of OCD-RDs remain largely unknown. There is a pressing need to understand the causal mechanisms implicated in these disorders, with views to improving clinical outcomes, reducing chronicity and societal costs. This symposium includes a series of talks dealing with genetic, epigenetic, immunological and environmental risk factors for OCD and Chronic Tic Disorders. Dr Edna Grünblatt (Zurich) will present the results of their on-going epigenetic study of the serotonin promoter in early onset OCD. Dr Astrid Morer (Barcelona) will present the results of a study testing the autoimmune hypothesis in pediatric OCD, focusing on the major histocompatibility complex. Dr Ana Perez-Vigil (Barcelona/Stockholm) will present the results of a Swedish longitudinal, population-based study examining the potential role of a wide range of infections as triggers for OCD and Chronic Tic Disorders. Finally, Prof Hoekstra (Groningen) will present newly collected data on the role of pregnancy and delivery related adverse events in relation to Tourette syndrome and comorbid OCD and ADHD. Data will be part of the TIC Genetics study, a multicenter study involving sites from the US, Europe and

South Korea involving about 2,000 recently collected and well characterized individuals with a tic disorder.

T7-01-01 Epigenetic changes in the serotonergic system in pediatric OCD

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Obsessive–compulsive disorder (OCD) is a debilitating psychiatric disorder, characterized by recurring, anxiety-laden intrusive thoughts (obsessions) and repetitive behaviours (compulsions). A heritability component to OCD vulnerability has been identified. In particular, the serotonergic system seems to play a role in OCD, as the serotonin transporter (SLC6A4) demonstrating risk for OCD. However, epigenetic changes, including DNA methylation, may also contribute to the pathophysiology of OCD. In the current study we determined DNA methylation levels of the SLC6A4 promoter in saliva and blood from early-onset OCD patients and demographically matched controls. SLC6A4 promoter DNA methylation levels were higher in saliva of OCD patients compared to controls. Our data suggest that in addition to the genetic variations on the SLC6A4 gene known to play a role as risk for OCD, epigenetic variations in SLC6A4 promoter of children and adolescent with OCD contribute to its risk. These epigenetic alterations may reflect relevant brain function alterations. As, for example, the recent investigation in healthy controls finding increased methylation of the SLC6A4 promoter region correlating with the activation of the amygdala (Nikolova et al. Nat. Neurosc. 2014).

Keywords: OCD, Genetics, Epigenetics, Serotonin, SLC6A4.

T7-01-02 Infections as risk factors for OCD and chronic tic disorders

Ana Pérez-Vigil^{1,2}, David Mataix-Cols¹, Mas Forsman³, Marcus Boman³, Katarina Almqvist-Malmros³, Paul Lichtenstein³, Christian Rück¹, Eva Serlachius¹

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Introduction: A causal relationship between postinfectious autoimmune phenomenon and some childhood neuropsychiatric disorders has been proposed.

Objective: To test the hypothesis of an increased rate of infections preceding the childhood onset of OCD and chronic tic disorders.

Methods: First, case–control study of a large regional database comparing the previous year’s occurrence of diverse infections in patients aged 0–18 years diagnosed between January 2001 and December 2009 with that in controls matched for age, gender and socioeconomic status. Secondly, we performed within-individual

analysis among patients comparing the occurrence of infections the year prior the diagnosis of the psychiatric illness with that in the previous year.

Results: Individuals diagnosed with OCD, chronic tic disorder and a range of other neuropsychiatric disorders had a higher occurrence of infections the year preceding the diagnosis than matched controls. Risks were: OCD (OR 1.29; 95 % CI 1.10–1.50), tic disorder (OR 1.30; 95 % CI 1.01–1.66), ADHD (OR 1.17; 95 % CI 1.07–1.29), depression (OR 1.40; 95 % CI 1.30–1.51) and anxiety (OR 1.45; 95 % CI 1.35–1.55). The association with ASD was not statistically significant. Longitudinal, within-individual analysis revealed that 3 disorders had more infections the year preceding the diagnosis, compared to the previous year (i.e. 2 years before diagnosis): OCD (OR 1.34; 95 % CI 1.05–1.70), depression (OR 1.41; 95 % IC 1.26–1.58) and anxiety disorders (OR 1.46; 95 % CI 1.31–1.63). Directionality analyses showed that a neuropsychiatric disorder diagnosis did not increase the risk of subsequent infections 1 year later.

Conclusions: The results of the present longitudinal epidemiological study suggest that a wide range of infections, not limited to streptococcus, broadly increase the risk of receiving a neuropsychiatric disorder diagnosis, particularly OCD, depression and anxiety disorders. **Keywords:** Infections, OCD, Tourette's syndrome, Neuropsychiatric disorders, Epidemiology, Cohort study.

T7-01-03

How could the HLA and the immune function contribute to the development of obsessive–compulsive disorder?

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Abnormal autoimmune activity has been implicated in a number of neuropsychiatric disorders, including obsessive–compulsive disorder (OCD) and Tourette syndrome, leading researchers in the field to speculate with an autoimmune hypothesis of both disorders. The HLA genes (major histocompatibility complex on chromosome 6) have the highest genetic relative risk for autoimmune disorders such as diabetes mellitus, rheumatoid arthritis, systemic lupus erythematosus, psoriasis and asthma. In order to test whether specific HLA subtypes may contribute to genetic susceptibility to OCD, we have typed 98 children and adolescents with an OCD diagnosis for HLA class I and class II alleles and compared their frequencies with 541 control subjects typed as donors of hematopoietic cell transplantation. We used LIFECODES HLA-SSO typing kits to identify the HLA alleles present in a PCR-amplified sample. We have identified A, B, C, DRB1 and DQB1 loci at an intermediate resolution. Our sample was constituted by 98 consecutive OCD patients (53 males, 48 females, mean age 14.8 ± 2.5) recruited at the Child Psychiatry department of Hospital Clínic, Barcelona, between 2011 and 2014. About 20 % had a very early onset of symptoms and 29 of the total sample (28.7 %) had tics at some point in their life (5 had a comorbid Tourette

disorder diagnosis). Referring to genotyping results, in class I group, the HLA-A*29 (OR 1.6 95 % CI 1.01–2.61); HLA-B*15 (OR 1.67 95 % CI 0.95–2.99), B*49 (OR 2.17 95 % CI 1.15–4.09), B*56 (OR 11.1 95 % CI 1–123) and C*17 (OR 1.6 95 % CI 0.4–6.1) were significantly associated with Obsessive Compulsive disorder ($p < 0.05$). Regarding class II alleles, DQB1*04:02 had a significant correlation (OR 1.53 CI 95 % 0.71–3.3) and DRB1 did not show significant association with the disease. Although we found a modest risk conferred by individual alleles (Odds Ratio mainly < 2) we will consider some explanations about the role of immune function and autoimmune hypothesis in OCD. HLA molecules could interact with some microbiological agents and have a critical role in antigen presentation during the immune response process associated to infections. Vulnerability to developing OCD could involve immunogenic factors, but need to be understood in the context with other complex epigenetic mechanisms.

Keywords: OCD, Tourette's syndrome, Immune system, Major histocompatibility complex, Genetics, infections.

T7-01-04

Role of pregnancy and delivery complications in Tourette syndrome and associated comorbid conditions

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Introduction: Although Tourette syndrome has a well-established genetic background, twin and family studies have indicated that there is also a substantial role for environmental factors in the etiology and expression of Tourette syndrome and associated comorbid conditions. While previous studies have implicated a possible role for prenatal exposure to smoking, for the presence of severe psychosocial stress during pregnancy, and for delivery complications as risk factors for Tourette syndrome, results across studies have been inconsistent, probably due to small sample sizes. Our objectives were to investigate the role of pregnancy and delivery complications in (1) the presence and severity of tic disorders and (2) the presence and severity of comorbid attention-deficit/hyperactivity disorder (ADHD) and obsessive–compulsive disorder (OCD).

Methods: Analyses were done in participants of The Tourette International Collaborative Genetics (TICGenetics; <http://tic-genetics.org>) study was established in 2011 to further our understanding of the genetic architecture of tic disorders by recruiting a large sample of well-characterized affected probands and their relatives (total current $N = 1200$). We compared groups who were exposed to the pre- and perinatal adverse events with those who were not exposed on presence of a tic disorder, tic disorder severity, and presence and severity of comorbid ADHD and OCD; groups were carefully matched on age, sex, and ethnicity.

Results: Only assisted reproduction and prenatal exposure to alcohol were risk factors for tic disorders. Delivery complications, severe morning sickness during pregnancy, assisted reproduction, prenatal exposure to alcohol, and a low APGAR score immediately after birth were risk factors for comorbid OCD and ADHD. Prenatal exposure to smoking was not a risk factor.

Discussion: Our results indicate that most pregnancy and perinatal complications do not play a role in tic disorders but are related to comorbid ADHD and OCD. As important next steps we plan to investigate possible gene*environmental interaction effects in relation to tic disorders and associated comorbidities.

Keywords: Tic disorders, ADHD, OCD, Pregnancy, Delivery.

T7-02**Mentalization Based Treatment (MBT) approaches to working with children, adolescents and families**

Introduction: In recent years there has been an exciting development of innovative applications of MBT for work with troubled children, adolescents and their families. These include:

- MBT for Adolescents presenting with self-harm and BPD
- Adolescent Mentalization-based Integrative Treatment (AMBIT) for adolescents multiple problems including substance abuse, self harm, eating disorders and persistent offending
- MBT for Families experiencing a broad spectrum of difficulties including divorce and separation
- MBT for Parents with infants at risk of Disorganized Attachment
- MBT for Parents with Personality Disorder (Early Years Parenting Unit, Anna Freud Centre)
- MBT for families with parental substance use disorder
- Psychoeducation using MBT to support resilience in vulnerable children and adolescents in school and community settings
- MBT for eating disorders

This symposium will present the latest empirical research and findings from the MBT programmes listed above and bring together some of the leading experts in the field of MBT for children, adolescents and their families.

The symposium will be chaired by **Gerry Byrne** (Clinical Lead Family Assessment and Safeguarding Service/ReConnect Service/Infant Parent Perinatal Service and MBT trainer Anna Freud Centre).

Invited (and confirmed) speakers include:

Professor Finn Skårderud

Director of The Foundation for Eating Disorders Oslo

Introduction and overview of the conceptual framework of Mentalization Based Treatment including empirical findings and outline of MBT with adolescent disorders such as eating disorders.

Dr Dickon Bevington

(Medical Director, Anna Freud Centre, Trainer in MBT-F and AMBIT)

Presentation of the work of AMBIT and MBT-families projects.

Professor Poul Lundgaard Bak MD

(Senior Researcher in the Danish Child Mental Health Research Program, Aarhus University and The Danish Committee for Health Education, Director of The Resilience Program)

Professor Lundgaard Bak will present evidence from pilot studies and the current RCT (2013–2018) on the use of mentalizing interventions to support resilience in children and adolescents in school and community settings.

T7-02-01**Minding the body. Mentalization-based treatment for eating disorders (MBT-ED)**

Professor Finn Skårderud, MD, PhD. Institute for Eating Disorders, Oslo, Norway

Mentalization-based treatment is evidence-based medicine for borderline personality disorder and self-harm. Today there is great interest in implementing such principles in other areas, e.g. addiction, PTSD, depression and as mentalization-based therapy for eating disorders (MBT-ED) (Skårderud and Fonagy, 2012).

Mentalizing is defined as the ability to understand feelings, cognitions, intentions and meaning in oneself and in others. The capacity to understand oneself and others is a key determinant of self-organisation and affect regulation. Eating disorders will be described as examples of different forms of impaired mentalizing, and such

impairments are stated to be central psychopathological features in eating disorders. Psychotherapeutic enterprise with individuals with compromised mentalizing capacity should be an activity that is specifically focused on the rehabilitation of this function. Mentalization-based psychotherapy for eating disorders should also have a special emphasis on how the body is involved in representing mental states. The presentation will reflect the on-going work of manualizing MBT-ED.

Skårderud F, Fonagy P (2012) Eating disorders. In: Bateman A, Fonagy P (eds) Handbook of mentalizing in mental health practice. American Psychiatric Publishers, Washington DC, pp 347–383

T7-02-02**There's nothing so practical as a good theory (KURT LEWIN, 1951): extending the applications of mentalizing to families (MBT-F) and to complex, high risk and "hard to reach" youth (AMBIT)**

Dr Dickon Bevington MA MBBS MRCPsych PGCEr

Consultant in Child and Adolescent Psychiatry in Cambridgeshire and Peterborough Foundation (NHS) Trust, and Medical Director of The Anna Freud Centre, London.

Mentalization is an integrative conceptual framework; its coherence with Social-Ecological, Neurodevelopmental, and particularly Attachment models means that it lends itself well to applications extending beyond adult borderline personality disorder. In particular we emphasise adaptations for children, families, and complex youth with multiple comorbidities and ambivalent, or frankly aberrant, relationships towards help and helpers. We describe two adaptations developed at The Anna Freud Centre that share the therapist's mentalizing stance and more with MBT.

MBT-Families is in one sense a standalone manualized intervention that places the development and recovery of mentalizing between family members at the heart of its therapeutic goals; in another sense it could be seen as a reframing of structural and strategic systemic, psychodynamic and cognitive-behavioural techniques whose particular focus on intersubjectivity may best be seen as helpful augmentation for established therapeutic models, rather than proposed as a new "challenger to the throne".

AMBIT applies mentalizing theory to street level outreach and early intervention work in four different directions. Mentalizing techniques are not just deployed in face to face *client* work but also to support the development of well-connected *teams* of workers, and to reduce the level of "dis-integration" between the multiple agencies that operate in complex professional *networks* around complex, high risk, help-avoidant cases. Described by some as a form of "pre-therapy", AMBIT seeks at least as much to create the system conditions most likely to support therapeutic change as it does to shape the detailed (and often quite situation-specific) close-up work of facilitating that change. First presented (as Integrative Multimodal Practice) at ESCAP in 2007 as a proposal for "barefoot practitioners", AMBIT has developed into an approach that over 90 teams across the world have been trained in, and these teams now participate in a growing "Community of practice" (Wenger and Lave) that shares emerging best practice and learning via its award-winning wiki-based treatment manuals (<http://www.tiddlymanuals.com>). This open source technology is one way that AMBIT supports its fourth main focus, which is in creating '*Learning organisations*' (Senge) that are evidence-oriented where robust evidence-based practice is lacking, and which collaborate to develop and share emerging practice-based evidence; we propose that this is a good practical example of what John Weisz has described as "deployment-focused" treatment development programs.

Bevington D, Fuggle P, Fonagy P, Asen E and Target M (2012) Adolescent mentalization-based integrative therapy (AMBIT): a new integrated approach to working with the most hard to reach adolescents with severe complex mental health needs. *CAMH J* (published electronically May 4, 2012)doi:10.1111/j.1475-3588.2012.00666.x

Jump up Asen E, Bevington D (2007) Barefoot practitioners: a proposal for a manualized, home-based Adolescent in Crisis Intervention Project. In: Baruch G, Fonagy P, Robins D (eds) *Reaching the hard to reach*. John Wiley, Chichester—an early description of the model, with less emphasis on the organisational elements.

T7-02-03 The Danish Mentalization-based Resilience Program (RP)

Professor Poul Lundgaard Bak MD

The RP is a highly flexible and very simple modular mentalization-based intervention program which can be tailored to specific needs and situations in individual therapy as well as group levels such as schools and work place environments. The program is currently being tested in four large-scale controlled trials in Denmark (schools and educational institutions, adults diagnosed with ADHD and children in foster care). The program is also locally implemented and tested in four other European countries. The program is available on <http://myresilience.org/>. Project resume and trial protocols can be found on the subsite “about us”.

T7-02-04 Minding the ‘child-in-mind’. Mentalization-based treatment for parents (MBT-P)

Gerry Byrne, Consultant Nurse and Child Psychotherapist, Clinical Lead Family Assessment and Safeguarding Service and ReConnect Service, UK

The Lighthouse© MBT-Parenting programme aims to enhance parents’ capacity mentalize and in particular to mentalize their children, to enhance attunement in parent–child relationships, to promote secure attachment and reduce Disorganization and to reduce risk of harm and of trans-generational transmission of psychopathology including BPD traits. The programme is underpinned by research in the fields of attachment, child development and neuroscience, by core psycho-analytic concepts offering insight into how minds and relationships work and advances in Mentalization Based Treatment for BPD. The Lighthouse© MBT-P programme is being piloted in the UK on two sites (Oxford and Buckinghamshire) and evaluated by UCL/Anna Freud Centre team lead by Professor Pasco Fearon. The presentation will draw on the emerging data from the evaluation and will reflect the on-going work of manualizing the Lighthouse© MBT-P.

T7-03 Clinical and neuroimaging developmental correlates in the offspring of patients with schizophrenia and bipolar disorder

C. Díaz-caneja, C. Moreno, G. Sugranyes

Hospital General Universitario Gregorio Marañón, Cibersam, Iisgm, School of Medicine, Universidad Complutense De Madrid; Hospital

Clínic of Barcelona, Cibersam, Institute Clinic of Neurosciences, IDIBAPS, Barcelona, Spain

Chair: Covadonga M. Díaz-Caneja, MD. Child and Adolescent Psychiatry Department, Hospital General Universitario Gregorio Marañón, CIBERSAM, IISGM, School of Medicine, Universidad Complutense de Madrid, Madrid, Spain
Symposium overview

Research on early predictors of psychiatric disorders is now shifting towards the study of genetically loaded samples. Advantages of this approach are facilitating early detection, gaining understanding about illness development and, ultimately, developing novel approaches for the early recognition and implementation of preventive strategies and early therapeutic interventions. This method can be particularly relevant for the study of psychiatric disorders linked to the disruption of neurodevelopmental processes, including psychotic and affective disorders, with onset of their first symptoms during childhood or adolescence. The joint study of child and adolescent offspring of parents with different psychiatric illnesses also allows us to determine their shared and specific risk factors. The objective of this symposium is to explore common and differential clinical and neurobiological characteristics of child and adolescent offspring of parents with schizophrenia and bipolar disorder, and compare them with the offspring of community controls. It will focus on structural brain characteristics, brain connectivity, and temperamental profiles, which may represent vulnerability markers that precede illness development in these high-risk populations.

T7-03-01 Temperamental profiles in child and adolescent offspring of patients with schizophrenia and bipolar disorder and community controls

Speaker: Covadonga M. Díaz-Caneja, MD. Child and Adolescent Psychiatry Department, Hospital General Universitario Gregorio Marañón, CIBERSAM, IISGM, School of Medicine, Universidad Complutense de Madrid, Madrid, Spain

Authors: Covadonga M. Díaz-Caneja¹, Raquel P. Vicente-Moreno¹, Goretti Morón-Nozaleda^{1,2}, Vanessa Sánchez-Gistau³, Soledad Romero³, Elena de la Serna³, Gisela Sugranyes³, Immaculada Baeza³, Carmen Moreno¹, Dolores Moreno¹

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Background: The study of temperament dimensions in offspring of patients with severe mental disorders can be a useful strategy to detect early vulnerability markers. To date no previous study has assessed temperament dimensions in schizophrenia (SzO) and bipolar offspring (BpO). The aims of this study were to compare temperamental profiles in SzO and BpO with community control offspring (CcO) and to assess their association with clinical and functional measures.

Methods: The Dimensions of Temperament Survey-Revised (DOTS-R) was used to assess temperament in BpO (N = 80), SzO

($N = 34$) and CcO ($N = 101$). Psychopathology in the offspring was assessed using the Kiddie Schedule for Affective Disorders and Schizophrenia (K-SADS). Temperament dimensions in the high-risk offspring with and without lifetime psychopathology were compared. Bivariate correlations were used to assess the association between temperament dimensions and clinical (Hamilton Depression Rating Scale, Young Mania Rating Scale, Clinical Global Impression Severity and the Scale of Prodromal Symptoms) and functional (Premorbid Adjustment Scale and Global Assessment of Functioning) measures. Statistical analyses were performed with SPSS 18.

Results: Both SzO and BpO showed higher scores in negative mood, as compared with CcO ($p < 0.05$ and $p < 0.01$, respectively). SzO showed higher scores in activity level than BpO ($p < 0.05$). High risk offspring with psychopathology showed higher scores in activity level ($p < 0.01$) and negative mood ($p < 0.01$), and lower scores in task orientation ($p < 0.05$), as compared with high risk offspring without psychopathology. The negative mood temperament dimension was significantly correlated with depression scores, clinical severity of the illness, prodromal psychotic symptoms, premorbid adjustment in childhood and early adolescence, and global functioning.

Conclusions: Specific temperament patterns may be useful in characterizing bipolar and schizophrenia offspring and could represent early vulnerability markers in this population. Future longitudinal studies should ascertain the association between temperamental traits and the development of psychopathology.

T7-03-02

Brain structural characteristics of child and adolescent offspring of patients with schizophrenia and bipolar disorder and community controls

Speaker: Gisela Sugranyes, MD, PhD. Department of Child and Adolescent Psychiatry and Psychology, Hospital Clinic of Barcelona, Institute Clinic of Neurosciences, IDIBAPS, CIBERSAM and 2009-SGR-1119, Generalitat de Catalunya, Barcelona, Spain

Authors: Gisela Sugranyes^{1,2}, Elena de la Serna^{2,3}, Soledad Romero^{2,3}, Vanessa Sanchez-Gistau^{1,2,3}, Anna Calvo¹, Dolores Moreno^{3,4}, Immaculada Baeza^{1,2,3}, Covadonga M. Díaz-Caneja^{3,4}, Teresa Sánchez-Gutiérrez⁴, Joost Janssen^{3,4}, Nuria Bargallo^{1,3,5}, Josefina Castro-Fornieles^{1,2,3,6}

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Background: There is increasing support towards the notion that schizophrenia and bipolar disorder share neurodevelopmental underpinnings, although areas of divergence remain. In this study we set out to examine grey matter structure characteristics of child and adolescent offspring of patients with bipolar disorder and schizophrenia comparatively.

Method: In this two centre study, high resolution magnetic resonance structural neuroimaging data was acquired in 198 children and adolescents (aged 6–17 years): 38 offspring of schizophrenia patients (SzO); 77 offspring of bipolar patients (BpO) and 83 offspring of community controls (CcO). Diagnostic assessments and symptom measures were also obtained. Analyses of total brain volumes and voxel based morphometry (employing family-wise error correction (FWE)) were conducted.

Results: Relative to CcO, SzO showed a decrease in total cerebral grey matter volume ($p = 0.003$) and at a voxel-based level, following whole-brain analyses, in the left superior temporal cortex ($pFWE = 0.019$). Relative to BpO, SzO exhibited reduction of grey matter volume in the left inferior frontal cortex/anterior insula ($pFWE < 0.001$) and bilateral occipital cortex ($pFWE = 0.005$) (whole-brain analyses). No differences were observed between BpO and CcO. Total ($p = 0.017$) and regional ($p = 0.022$) grey matter volume in the left inferior frontal cortex/anterior insula were inversely correlated with attenuated negative symptom scores in SzO.

Conclusions: This first comparative study in bipolar and schizophrenia offspring suggests that grey matter volume reduction in childhood and adolescence may be specific to schizophrenia offspring. This may index a greater neurodevelopmental impact of risk for schizophrenia relative to bipolar disorder during youth.

T7-03-03

Brain connectivity in individuals at genetic high-risk of psychotic and affective disorders

Speaker: Carmen Moreno, MD, PhD. Child and Adolescent Psychiatry Department, Hospital General Universitario Gregorio Marañón, CIBERSAM, IiSGM, School of Medicine, Universidad Complutense de Madrid, Madrid, Spain.

Authors: Carmen Moreno¹, Joost Janssen¹, María Goretti Morón-Nozalea^{1,2}, Covadonga M. Díaz-Caneja^{1,3}, Josefina Castro-Fornieles^{3,4}, Elisa Rodríguez-Toscano¹, Elena de la Serna³, Vanessa Sanchez-Gistau^{3,4}, Soledad Romero^{3,4}, Immaculada Baeza^{3,4}, Gisela Sugranyes^{3,4}, Dolores Moreno^{1,3}

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Conceptualizing the brain as a network has potentially important implications for understanding clinical brain disorders. Neuroimaging by diffusion tensor imaging (DTI) is a functional magnetic resonance application sensitive to microstructural organization of white matter tracts that allows to evaluate axonal integrity and structural efficiency of specific neural tracts and estimate the role of structural disconnectivity in mental disorders, even in early stages. New applications of DTI have shown that brain networks include highly connected hub nodes that may play an essential role in functionality, supporting integrative processing and adaptive behaviours. As compared with other brain regions, those hubs may have higher metabolic demands and longer-distance connections and have higher lesion probability in brain disorders (Kahn et al., 2014).

Schizophrenia and bipolar disorder are chronic, severe, and disabling mental disorders. Recent research shows that instead of being the result of regionally isolated brain pathologies, they are more likely due to the alteration of interactions between two or more regions. Functional connectivity profiles across different brain regions in the entire cerebral cortex in patients with schizophrenia and bipolar disorder have shown reduction in functional connectivity within the frontoparietal control network, including dorsolateral prefrontal cortex, lateral parietal cortex, and posterior temporal cortex, compared to controls (Baker et al., 2014). It has been hypothesized that disruption of brain networks may occur prior to illness onset. In fact, both psychotic and bipolar disorders may have their onset during adolescence (Merikangas et al., 2012), at the time of maximum likelihood of myelination of several white matter tracts, among others the corpus callosum. However, research in high-risk populations for schizophrenia and bipolar disorder present controversial results so far. Some studies have found disruption in internal capsule, and corpus callosum or frontal white matter tracts in relatives of subjects with schizophrenia (Maniega et al., 2008; Camchong et al., 2009), and significant reductions in node specific metrics as compared with controls (Collin et al., 2013). In relatives of people with bipolar disorder, alterations have been found in corpus callosum and inferior longitudinal fasciculus (Versace et al., 2010). However, other studies including both offspring on parents with bipolar disorder and schizophrenia have not been able to detect those differences as compared with controls (McIntosh et al., 2005). In this talk, current knowledge on connectivity studies in high-risk populations will be reviewed, highlighting the potential of different functional imaging techniques and the value of these results for future research on mental illness.

T7-04 Assessment of identity development in adolescence (AIDA)

K. Goth

Psychiatric University Clinics (upk) Basel, Switzerland

In the revision of DSM, disorders of identity as an indicator of impaired self-related personality functioning are integrated as a central diagnostic criterion for personality disorders. We developed the self-report questionnaire AIDA (Assessment of Identity Development in Adolescents) in 2012 for the use in adolescents aged 12 to 18 years to assess pathology-related identity based on a broad description of the field.

Psychometric properties of the original Swiss-German-US version of AIDA were very good, the total scale “identity diffusion” was significantly different between PD-patients and healthy controls with remarkable effect size (d) of 3.71 standard deviations.

As the interest in the assessment of identity is high, we are supporting several international research groups to develop culture specific adaptations of this questionnaire. A thorough examination of psychometric properties revealed that a specific cultural adaptation is even necessary for countries with the same language but different cultural background (like Spain, Chile and Mexico).

In this symposium the results of identity assessment with the AIDA in different languages and cultures will be presented and discussed.

Keywords: Identity, Assessment, Personality functioning, Personality disorder, Transcultural.

Chair: Goth, K.

T7-04-01 Identity development of Turkish adolescents

F. C. Çuhadaroğlu, Z. Tuzun, D. Akdemir, D. F. Özdemir, E. Ataman

Objective: In 2012 Goth, Foelsch, Schlueter-Mueller and Schmeck introduced the AIDA (Assessment of Identity Development in Adolescence), a reliable and valid self-report questionnaire to assess pathology-related identity development in healthy and disturbed adolescents. Our Turkish research team joined the international AIDA study and developed a culture-adequate translation of the AIDA inventory. In a beta-test and a pilot test first psychometric properties were evaluated.

Method: The pilot test was performed in a sample of $N = 33$ adolescents with 8 boys (24.2 %) and 25 girls (75.8 %) aged 13 to 18 years (Mean 15.6 SD 1.4). 14 of them had a psychiatric diagnose related to identity problems (PD, depression, anxiety disorder). Analyses of scale reliability were performed only on subscale level due to the small sample size.

Results: We found very good psychometric properties with reliability Alpha coefficients of 0.82, 0.77, and 0.77 for the three subscales of the primary scale Discontinuity and 0.76, 0.77, and 0.80 for the three subscales of the primary scale Incoherence. Some items had to be reformulated as a consequence of the pilot test to establish the main test version of AIDA Turkey, because the obtained coefficients for item total correlation (r_{it}) showed a correlation between these items and the assigned subscale below the criteria.

Conclusion: The pilot version of AIDA Turkey showed a promising psychometric quality. The established main test version will be assessed in a bigger school and clinical sample. Specific changes in item formulations for Turkish adolescents to reach true content equivalence of the targeted constructs and sufficient reliability will be discussed.

Keywords: Adolescence, Identity, Psychometric Properties, Culture Adaptation, Personality Disorder.

T7-04-02 Identity development in Bulgaria—psychometric properties of culture adapted AIDA inventory in school and clinical sample

A. Bistran, N. Polnareva, A. Avramova, D. Terziev

Objectives: In 2012 Goth, Foelsch, Schlueter-Mueller and Schmeck introduced a reliable and valid self-rating inventory—AIDA (Assessment of Identity Development in Adolescence), to assess pathology-related identity development in healthy and disturbed adolescents. In a series of beta-test and pilot tests ($N = 40$, $N = 50$, $N = 311$) the Bulgarian team engaged in the AIDA international study aimed to develop a culture-adequate formulation for every original item for the bulgarian version of the AIDA inventory.

Methodology: After the last pilot test items 8, 33, 23, 56, 48, 49 had to be reformulated, as the obtained coefficient for item total correlation (r_{it}) showed little correlation between this items and the assigned subscale or scale. Four more items had been slightly changed in formulation to improve comprehensibility by considering specific idioms and culture-specific aspects. The “new” improved Bulgarian AIDA version was tested in a school sample ($N = 150$) and a clinical sample ($N = 45$). Statistical analyses regarding the number of missing values per item, age- or gender-related item bias, item total correlations, and scale reliabilities Cronbach’s Alpha were conducted.

Results: At this end the total item correlation for the reformulated items was satisfactory ($r_{it} > 0.30$), reflecting not only a better comprehension, but capable to truly represent the targeted contents/concepts. All scales and subscales showed good to very good reliability (α (Identity Diffusion $\alpha = 0.93$; primary scales Discontinuity = 0.83, Incoherence = 0.90). We will discuss specifics in the application of AIDA inventory in Bulgarian adolescent population with accent on the cultural specificity.

Conclusion: Our first efforts with the translation of the AIDA inventory showed the necessity for careful culture-adapted translation or even reformulation of the targeted constructs in order to reach true content equivalence and sufficient reliability.

Keywords: Adolescence, Identity, Psychometric Properties, Culture Adaptation, Personality Disorder.

T7-04-03

Who am I? The specifics of AIDA in Czech Republic

Petra Šimečková, Irena Smetáčková

Objective: In 2012 Goth, Foelsch, Schlueter-Mueller and Schmeck introduced the reliable and valid self-report questionnaire AIDA (Assessment of Identity Development in Adolescence), to assess pathology-related identity development in healthy and disturbed adolescents. In a series of beta-test, pilot test and main test ($N = 24$, $N = 24$, $N = 276$) the Czech translation team developed a culture-adequate formulation for every original item to establish the AIDA Czechia.

Method: Some items had to be reformulated during the pilot tests to improve psychometric properties by considering specific idioms and culture-specific aspects, as the obtained coefficient for item total correlation(r_{it}) showed little correlation between this items and the assigned subscale or scale. For the main test, the final version for AIDA Czechia was tested in a combined school and clinical sample ($N = 6$ Borderline PD) of 89 boys (32.2 %), 187 girls (67.8 %), with age range 11–18, Mean 14.9, SD 1.8.

Results: We found good psychometric properties with high total scale (Diffusion = 0.91), primary scale (Discontinuity = 0.79; Incoherence = 0.87) and subscale ($\alpha = 0.60–0.75$) reliabilities Cronbach's α . Both primary scales differentiated significantly between PD-patients and students with effect sizes (d) of 1.19 and 1.37 as a sign of good criterion validity.

Conclusion: AIDA Czechia is a reliable translation of the original AIDA questionnaire. The process showed the necessity for a careful culture-adapted translation or even reformulation of the targeted constructs in order to reach true content equivalence and sufficient reliability. We will discuss cultural specifics. To analyze validity in detail, further clinical samples will be assessed.

Keywords: Adolescence, Identity, Psychometric Properties, Culture Adaptation, Personality Disorder.

T7-04-04

Assessment of identity in a kosovarian sample

Uka, Aferdita

Objective: Early detection and intervention have proven to be the most important topic in developmental psychopathology. As identity diffusion is discussed as central construct in developing personality disorders, a reliable and valid tests is needed to enable valid diagnostics as well as a high quality research. The questionnaire AIDA

(Goth, Foelsch, Schlueter-Mueller and Schmeck, 2012) is a reliable and valid method to assess pathology-related identity development in self-rating in adolescents.

Method: In cooperation with the original authors, our Kosova group has developed a culture-specific translation of the AIDA questionnaire in order to join the international AIDA study. After being translated and adapted to Albanian language and two pilot tests, the Kosovar AIDA (Assessment of identity development in adolescence) was tested for psychometric properties in a school sample in Kosova of $N = 703$ (male 358 (50.9 %), female 345 (49.1 %); age 12–18, Mean 14.6, SD 1.9). In a subsample of $N = 46$ a retest was conducted after 2 weeks.

Results: The main test provided sufficient scale reliabilities with $\alpha = 0.88$ for the total scale Diffusion, 0.74 for the primary scale Discontinuity and 0.84 for the primary scale Incoherence. The retest reliabilities were 0.73, 0.61, 0.74, respectively. No significant differences in the AIDA scores between girls and boys and between younger and older adolescents were obtained in Kosovo. No item showed a systematic difference (MANOVA) concerning sex or age. Thus, the item formulations can be regarded as age and sex neutral.

Conclusion: AIDA Kosovo is a reliable translation of the original AIDA questionnaire. To analyze diagnostic validity, further clinical samples will be assessed. Results will be discussed from the perspective of societal and cultural characteristics.

Keywords: Adolescence, Identity, Psychometric Properties, Culture Adaptation, Personality Disorder.

T7-05-01

FMRI-based neurofeedback from the anterior cingulate cortex for adults with attention-deficit/hyperactivity disorder. A proof of concept study

Jan Buitelaar, Anna Zilverstand, Bettina Sorger, Rainer Goebel

Attention-deficit/hyperactivity disorder (ADHD) is associated with poor cognitive control and hypofunctioning of the dorsal anterior cingulate cortex (ACC) during continuous performance, response inhibition and switching tasks. We investigated for the first time whether fMRI neurofeedback training targeted at increasing activation levels in the ACC in adults with ADHD leads to reduction of ADHD symptoms and improved cognitive functioning. An exploratory, randomized controlled treatment study with blinding of the participants was conducted. Participants with ADHD ($n = 7$ in the active feedback condition, and $n = 3$ in the control condition) attended four weekly training sessions, during which they performed a mental calculation task at varying levels of difficulty, in order to learn how to up-regulate ACC activation. Prior, and after the training ADHD symptoms and cognitive functioning were assessed by neuropsychological testing. Results showed that neurofeedback participants achieved a significant increase in ACC activation levels over sessions. The neurofeedback group did not show a significant reduction of ADHD symptoms, but improved considerably and significantly on measures of attentional control and working memory. Individual modulation performance was highly correlated with the ability to sustain attention and working memory capacity, but modulation success was not highly correlated with treatment change. The contribution of the provided neurofeedback information to treatment change can therefore not be finally evaluated.

T7-05-02**A randomized controlled clinical trial of real-time functional magnetic resonance imaging neurofeedback for adolescents with attention deficit hyperactivity disorder (ADHD)**

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Background: Real-time fMRI-Neurofeedback (rt-fMRI-NF) is a novel technique that permits individuals to attain self-regulation of brain regions. Due to its better spatial resolution compared to electroencephalography NF (EEG-NF), it allows self-regulation of deep inferior frontal structures. Under activation of right inferior frontal cortex (rIFC) has been shown to be a key pathophysiological marker of ADHD. IFC is up-regulated by psychostimulant medication, suggesting that rt-fMRI-NF targeting rIFC self-upregulation may be a promising neurotherapy for ADHD.

Methods: Thirty 12–18 year old boys with ADHD were randomized to rt-fMRI-NF for self-upregulation of rIFC (active group) or right parahippocampal gyrus (rPHG, control group). Visual feedback was presented in the form of a rocket that had to be moved from the ground to reach planets in space. The rt-fMRI-NF was delivered in 14 runs of 8 min each, across 4 visits and within 2 weeks. Increase in rIFG and rPHG activation was examined in both groups. Clinical and cognitive outcome measures, as well as brain activation data during a motor inhibition task known to activate rIFC (Stop task) were assessed pre- and post-intervention.

Results: Preliminary results show a positive linear increase in rIFC activation in the active relative to the control group. Results on clinical, cognitive and fMRI Stop task outcome measures will be presented at the conference.

Conclusion: The results of this study will indicate whether ADHD adolescents can self-regulate and enhance specific brain activation after relatively few rt-fMRI-NF sessions and if successful rIFC self-upregulation is associated with reductions of ADHD symptoms and improvements in cognitive functions.

T7-05-03**NIRS neurofeedback in ADHD**

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Objectives: Psychiatric disorders like ADHD are currently mainly treated with pharmacotherapeutic and, to a lesser extent, with psychotherapeutic methods. The success measured as improvement of symptoms under is surprisingly good with high effect sizes (>0.8) in randomized controlled trials, in particular for pharmacological treatment with stimulants. However, there is still room and need for improvement.

Methods: Neurofeedback methods based on EEG and fMRI methods are increasingly applied as an alternative or add-on therapeutic approach. The rationale behind these therapies is to show the subjects an immediate feedback of their brain activity. So they can learn how to regulate their brain activity and transfer this ability to real life situations.

Results: We established a neurofeedback protocol for regions of the prefrontal cortex based on measurements of brain activity with Near-Infrared Spectroscopy (NIRS). This NIRS-neurofeedback was applied in children and adults with ADHD with promising results.

Conclusion: Due to its high ecological validity, NIRS-neurofeedback might develop to an alternative or add-on therapy also for ADHD patients in future.

T7-06-01**Stimulant treatment history predicts frontal-striatal structural connectivity in adolescents with attention-deficit/hyperactivity disorder**

L. Schweren, C. Hartman, M. Zwiers, D. Heslenfeld, J. Oosterlaan, B. Franke, J. Buitelaar, P. Hoekstra

Introduction: Diffusion tensor imaging (DTI) has revealed subtle white matter abnormalities in individuals with attention-deficit/hyperactivity disorder (ADHD). Stimulant treatment may affect such abnormalities. The current study investigated long-term effects (i.e. multiple years) of stimulant treatment on structural connectivity within the frontal-striatal and mesolimbic dopaminergic pathways, in a large sample of children, adolescents and young adults with ADHD.

Methods: From the NeuroIMAGE cohort, 172 participants with ADHD (mean age 17, range 9–26) underwent diffusion-weighted MRI scanning, along with an age- and gender matched group of 96 healthy control participants. Detailed pharmacy records allowed exact quantification of cumulative stimulant intake in milligrams. Using probabilistic tractography, five group-specific white matter tract masks (orbitofrontal-striatal, orbitofrontal-amygdalar, amygdalar-striatal, dorsolateral-prefrontal-striatal and medial-prefrontal-striatal) were created. Fractional anisotropy (FA) and mean diffusivity (MD) within each tract were extracted for each participant. We analyzed case-control differences in FA and MD within each tract. Next, within the ADHD group, we predicted FA and MD per tract from cumulative stimulant intake.

Results: After correction for multiple testing, participants with ADHD showed reduced FA in the orbitofrontal-striatal tract ($p = 0.010$), which indicates decreased structural connectivity. Within the ADHD group, increased stimulant intake was associated with decreased MD, which is indicative of enhanced structural connectivity, in the same tract ($p = 0.011$).

Discussion: Participants with ADHD showed reduced structural connectivity in orbitofrontal-striatal pathways. Stimulant treatment was found to increase structural connectivity in this pathway. Our findings provide preliminary support for a long-term normalizing effect of stimulant treatment on structural orbitofrontal-striatal connectivity, and emphasize the importance of the orbitofrontal cortex and its connections in ADHD.

T7-06-02**Childhood diagnosed attention deficit/hyperactivity disorder reflected in the brain at rest in adulthood**

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Galway, Ireland; University of Melbourne, Parkville, Australia; St. James's Hospital, Dublin, Ireland

Background: The neurobiological underpinnings of Attention Deficit/Hyperactivity Disorder (ADHD) and particularly those associated with the persistence of ADHD into adulthood are not yet well understood. Correlation patterns in spontaneous neural fluctuations at rest are known as resting-state functional connectivity (RSFC) and the aim of this study was to determine ADHD-related differences in RSFC related to the long-term outcome of childhood ADHD compared to healthy controls.

Methods: Thirty-four adults with a childhood diagnosis of ADHD were split into persistent or remitted ADHD dependent upon the presence and severity of their symptoms. Their functional connectivity maps from attention, affective, default, and cognitive control networks involved in the psychopathology of ADHD were compared to thirty-six control participants.

Results: Controls displayed significantly more ventral attention network RSFC than patients with persistent ADHD ($p > 0.05$, family wise error (FWE) corrected) and more dorsal attention network RSFC than those in remission ($p > 0.05$ FWE corrected). Controls and remitters had more affective network RSFC than persisters ($p > 0.05$, FWE corrected). There was significantly more cognitive control network RSFC for ADHD participants compared to controls ($p > 0.05$, FWE corrected) whereas there was more default mode network RSFC for controls relative to all ADHD participants ($p > 0.05$, FWE corrected).

Conclusion: Ventral Attention network hypo-connectivity may be linked to increased distractibility in persisters. Moreover, affective network hypo-connectivity seems to be ADHD state dependent as well. Whether dorsal attention network hypo-connectivity found in remitters compared to controls is related to a compensation mechanism requires further investigation.

T7-06-03

Do outcomes for children with subthreshold ADHD differ from children with ADHD and non-ADHD controls?

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Background/Objectives: Few studies have delineated outcomes for community-based samples of children with Attention-Deficit/Hyperactivity Disorder (ADHD). Clinical cohort studies are biased towards children with more severe ADHD and comorbidities and under-represent girls and those with predominantly inattentive symptoms. It is unclear how outcomes differ for children who meet the full criteria for ADHD versus those with subthreshold symptoms. We aimed to compare the social, emotional, behavioural, quality of life and academic outcomes between three groups: (1) ADHD; (2) subthreshold ADHD; and (3) non-ADHD controls.

Methods: Participants were (179 ADHD; 86 subthreshold ADHD; 212 non-ADHD controls; mean age: 7.3 years) recruited in their second year of schooling from 43 schools in Melbourne, Australia following community-based screening ($n = 3734$). Group status was assessed in two stages: (1) parent and teacher Conners' 3 ADHD index; and (2) Diagnostic Interview Schedule for Children IV (DISC

IV). Children were defined as having subthreshold ADHD if they screened positive for ADHD by both parent and teacher report but did not meet the full criteria for ADHD on the DISC IV. Outcomes assessed 18 months later included parent and teacher ratings of social, emotional and behavioural functioning (Strengths and Difficulties Questionnaire), quality of life (Pediatric Quality of Life Inventory) and academic functioning (Social Skills Improvement System-Academic Competence subscale).

Results: Children with both full and subthreshold ADHD had poorer outcomes at baseline that persisted 18 months later (mean age 8.9 years) compared with controls including poorer academic functioning, increased social, emotional and behavioural difficulties, and reduced quality of life ($p < 0.001$). Although children with ADHD had elevated social, emotional and behavioural difficulties and poorer quality of life compared to the subthreshold group by parent-report ($p < 0.001$), they did not differ on most teacher-reported outcomes including academic functioning ($p = 0.35$), peer problems ($p = 0.75$) and emotional difficulties ($p = 0.98$), with the exception of behavioural difficulties ($p = 0.04$).

Conclusions: Children with subthreshold ADHD have comparably poor outcomes to those with full ADHD through the early school years. School-based outcomes were similar for children with full and subthreshold ADHD, with the exception of behavioural difficulties. It is possible that for children who did not meet full criteria for ADHD at age seven, functional deficits were more apparent in the structured school setting leading to discrepant views between parents and teachers, highlighting the importance of using multiple informants when assessing for ADHD. Preventive and early intervention approaches may be fruitful for children with both subthreshold and full ADHD.

T7-06-04

No long-term effects of stimulant treatment on six outcome domains in attention-deficit/hyperactivity disorder

L. Schweren, P. Hoekstra, B. Franke, D. Heslenfeld, J. Oosterlaan, J. Buitelaar, C. Hartman

Introduction: A large proportion of children with attention-deficit/hyperactivity disorder (ADHD) receive stimulant medication. Stimulants effectively and immediately reduce symptoms of hyperactivity and/or inattention in the majority of children with ADHD. It has been suggested that immediate treatment effects may translate into long-term benefits, such that outcome (when off medication) is better for individuals with a history of stimulant treatment compared to individuals without stimulant exposure. There is no evidence for this hypothesis, however, as long-term outcome studies to date assessed participants' functioning at follow-up in their medicated state, precluding the investigation of long-term treatment effects lasting beyond the immediate effects. The current study investigated whether stimulant treatment is associated with long-term behavioral outcome in a non-medicated state.

Methods: As part of the NeuroIMAGE study, children with ADHD (mean age 11 at baseline) were measured twice with an average follow-up time of 6 years. Two age-, gender-, and baseline-ADHD-severity-matched samples were derived: 80 participants who had received stimulant treatment between baseline and follow-up, and 80 participants who had not. First, we compared the change over time in six outcome domains (symptoms of hyperactivity, symptoms of inattention, emotional problems, peer problems, prosocial behavior, and functional impairment in daily life) between the two groups using linear mixed effects modeling. Second, within the medicated group,

we investigated how treatment intensity, treatment variability, and treatment trajectory (i.e. continually treated, stopped treatment, started treatment, and inconsistently treated) predicted changes in the six outcome domains.

Results: Regardless of stimulant treatment between baseline and follow-up, symptoms of hyperactivity significantly improved over time. Symptoms of inattention, peer problems, emotional problems, prosocial behavior, and functional impairment did not. Stimulant treatment between baseline and follow-up did not predict change in any outcome domain. Furthermore, we found no associations between changes in the six outcome domains over time and treatment intensity, treatment variability, or treatment trajectory.

Discussion: We found no long-term effects of stimulant treatment over time. Outcomes changed equally over time for participants who had received stimulants during the study period and participants who had not, and differences in treatment regime did not predict changes in outcome. These results emphasize the need for care of individuals with ADHD extending beyond childhood, and irrespective of prior stimulant treatment.

WEDNESDAY

W1-01

That there has to be evaluated in the field of child and adolescent psychotherapy

B. Golse, M. Corcos, M. Speranza, N. Godart, M. Robin, V. Delvenne, P. Jeammet, F. Zigante, A. Borghini, B. Falissard

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Overview: The evaluation of the effectiveness of psychotherapy in the field of childhood and adolescence has encountered many difficulties so far, for various reasons: mitigation or resolution of symptoms is not enough to say that efficiency (due to a possible “leak healing”), mental suffering in the young people is not easy to quantify and, finally, the structural changes are more difficult to grasp in an individual training or processing (the baby, child or adolescent) than in a subject in simple evolution (adults).

That said, the effectiveness of treatment is not the only target of the evaluation.

Three presentations will be based on quantitative and qualitative devices.

F. Zigante (Fr), A. Borghini (CH), E. Vion (Fr) and B. Golse (Fr) will show the interest of the narrative tests to follow the development of attachment patterns during the treatment, first phase of disorganization during the first year of the process can sometimes precede a subsequent reorganization and increase in attachment security, but not in the case of borderline conditions.

M. Robin (Fr), A. Pham-Scottetz (Fr), M. Speranza (Fr), V. Delvenne (Be) and M. Corcos (Fr) will present the results of the European network on Borderline Personality Disorder (EURNET-BPD) by emphasizing the fact that the prevalence of depressive dimension anaclitic elements and the type disorganized of attachment seems correlated with a lower acceptance psychotherapy and more hospitalizations.

N. Godart (Fr), Dr. Corcos (Fr), B. Falissard (Fr), Ph. Jeammet (Fr) and coll. finally will show that in severe anorexic patients, the addition of a family therapy in the management multidimensional

already including parents, increases the effectiveness of treatment and even after 13 years of follow up.

W1-01-01

Narratives and analytic therapy follow-up of change process in a thirty six children cohort during four years

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Study of narratives is a bridge between attachment theory and psychoanalysis.

It is explored by philosophy with the narrative identity concept (Paul Ricoeur, 1990), by psychoanalysis with concepts of linking and secondary process, by attachment with correlations between early interactions and narrative coherence development.

To assess therapeutic process, we follow the narrative evolution during psychotherapy.

In our present study, we follow up narratives evolution of children with psychopathology during analytic therapy. A cohort of thirty six children (neurosis (CFTMEA), or F93 Emotional disorders with onset specific to childhood (ICD10)/borderline or F91 Conduct Disorders and F92 Mixed disorders of conduct and emotions/psychosis or F84 Pervasive Development Disorder) from 4 to 11 years old is follow up during 4 years with every year assessment with ASCT (Bretherton et al., 1990) coded with CCH (Miljkovitch et al., 2008).

Results show significant progression of attachment representations and narrative from the first year of therapy. Children with neurosis improve content and form of their narratives as early as the the first year.

Psychotic children improve form before content of their narratives.

Narratives of borderline children show no significant evolution during analytic therapy. We discuss this result with attachment and psychoanalytic points of view.

Keywords: Narratives, Attachment, Psychoanalysis, Psychotherapy, Form, Content.

W1-01-02

Rethink psychotherapies of BPD adolescents in the light of quantitative studies: results of the European Network on Borderline Personality Disorder in Adolescence (EURNET-BPD)

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International guidelines on patients with BPD include psychotherapy first, and medication, hospitalizations in a second line. We question in this study the possibility and the way to apply the guidelines in adolescents with BPD, in the light of recent quantitative studies.

The EURNET-BPD explored different psychopathological aspects of adolescents aged from 13 to 18 years old: attachment, childhood traumas, alexithymia, facial affect recognition, impulsivity, health pathways,... Adolescents in this study mainly needed hospitalizations (85 % including 6 % day hospital), medications (85 %), and psychotherapies in 47 % of cases.

Results showed that externalized symptoms such as self-mutilations, repeated suicidal injuries, substance abuse, or bulimia are the health inductor. Affect dysregulation is important in these patients (alexithymia, low level of affect awareness, decreased facial affect recognition). Nonetheless, these factors and trauma in childhood do not explain entirely difficulties and ruptures in psychotherapies. Comorbid depression is also often diagnosed. Thus, our results confirm the prevalence of anaclitic aspects of depression and also the role of disorganized attachment. These factors seem to be linked with a lower acceptability of psychotherapy and with more hospitalizations.

Beyond emotional dysregulation, early object representation and attachment modalities seem to impact the possibility of psychotherapy in these patients. We propose to discuss the way to adapt cares and improve psychotherapy feasibility in these patients.

Keywords: Attachment, Borderline, Health care, Psychotherapy.

W1-01-03

Quantitative evaluation of the impact of family therapy: a randomized controlled trial comparison of adjunctive family therapy and treatment as usual following inpatient treatment for adolescent anorexia nervosa, a 13 years follow-up months outcome

Nathalie Godart, M.D., PhD., Leslie Radon, Ms, Jeanne, Duclos, PhD, Sylvie. Berthoz, Phd., Fabienne Perdereau, M.D., M.Sc., Florence Curt, M.D., PhD, Zoé Rein, M.Sc, Jenny Wallier, M.Sc, Anne Sophie Horreard, Irène Kaganski, M.D., Réjane Lucet, PhD., Maurice Corcos, M.D., PhD., Jacques Fermanian, M.D., PhD., Bruno Falissard, M.D., PhD., Martine Flament, M.D., PhD., Philippe Jeammet, M.D., PhD.

Context: Long term follow-up for evidence-based treatment trials for post-hospitalisation treatment of adolescent outpatients with severe anorexia nervosa (AN) are scarce.

Objective: To compare two multidimensional post hospitalization outpatient treatment programs (identical except that one included family therapy) for adolescents with severe AN.

Design: Randomized controlled trial conducted from January 21st, 1999 to July 22nd, 2002 and followed until 2014.

Setting: At the Institut Mutualiste Montsouris, René Descartes University of Paris, ambulatory post-hospitalization care.

Patients: Sixty female adolescents with DSM-IV AN, aged 13 to 19 years.

Interventions: The first group, “Treatment as Usual” (TAU) included sessions for the adolescent alone and sessions with a psychiatrist for the adolescent with her parents. Treatment for the second group (TAU + FT) was identical to TAU but also included a family therapy component targeting intra-familial dynamic but not eating disorder symptoms.

Main Outcome Measure: Morgan and Russell Score (good or intermediate outcome versus poor outcome) at 18 months of follow up. Our secondary outcomes index were the Global Outcome Assessment Scale total score and AN symptoms or their consequences (eating symptoms, body mass index, amenorrhea, number of hospitalizations in the course of follow-up, and social adaptation).

Results: After 18-months of follow-up, significant differences were found between the two programs in the numbers achieving a Good or Intermediate Outcome score on the Morgan and Russell Scales. TAU + FT was more effective than TAU (Intention to Treat analysis: TAU + FT Similar results were observed regarding weight outcome and menstrual status at 54 months follow-up and 13 years. We will expose in addition outcome of the two groups.

Conclusion: Adding FT, that has a principle focusing on intra-familial dynamic, to a multidimensional program already involving parents improves treatment effectiveness in severe AN patients even after 13 years follow up.

W1-02

Adolescent mentalizing breakdowns: evaluation and intervention of self-harming behaviors

T. Rossouw, F. Skarderut, D. Badoud

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Symposium Overview Proposal

Members

Symposium chair: Trudie Rossouw, Child Psychiatrist, North East London NHS Foundation Trust, UK

Speakers:

Deborah Badoud, (1) Developmental Clinical Psychology Unit, Faculty of Psychology, University of Geneva, Switzerland, (2) Office Médico-Pédagogique Research Unit, Department of Psychiatry, University of Geneva, School of Medicine, Switzerland

Finn Skarderut, Professor, PhD, MD. (1) Institute for Eating Disorders, Oslo, Norway

(2) Institute for Special Needs Education, University of Oslo, Norway.

Trudie Rossouw

Rationale

Non Suicidal Self-Injuries (NSSIs) are associated with a broad range of negative clinical outcomes and further considered as a potential early indicator of borderline personality disorder (BPD). Indeed, NSSI has been regularly associated with adult BPD features and is highly prevalent in adolescent patient with BPD. Moreover, retrospective studies highlight that 30 % of adult with a diagnosis of BPD report NSSI childhood or adolescent onset.

Besides clinical features, NSSI has been consistently linked with psychological processes, mostly emotion dysregulation or impulsivity. However, conversely to BPD for which investigations of social cognition have dramatically increased, socio-cognitive basis of NSSIs are far less known.

Recently, NSSI episode have been conceptualized as a prototypic temporary disruption of the adolescent processes of mentalization (i.e. the ability to reflect upon one’s own and other’s internal states and their relationship to behaviour). The recent developments for a mentalization-based approach of BPD paved the way for research on the underlying socio-cognitive mechanisms of NSSI during adolescence, and empirical research currently supports the mentalization-based therapeutic model for adolescent NSSI.

In this symposium we will first provide the theoretical and empirical rationale for considering mentalizing processes as central to adolescent NSSIs.

Furthermore the symposium will present the randomized controlled trial evidence for the effectiveness of the mentalization-based approach for self-injurious behaviours in adolescence. In addition examples of case studies will be presented too, as well as discussions about managing emotional storms in young people. This symposium will also include a paper on mentalizing the body and evidence of MBT treatment in young people presenting with eating disorders.

Keywords: Self-harm, Mentalization.

W1-02-01 Minding the body: mentalization-based treatment for eating disorders (MBT-ED)

Professor Finn Skårderud, MD, PhD

Background: Mentalization-based treatment is evidence-based medicine for borderline personality disorder and self-harm. Today there is great interest in implementing such principles in other areas, e.g. addiction, PTSD, depression and as mentalization-based therapy for eating disorders (MBT-ED) (Skårderud and Fonagy, 2012). Mentalizing is defined as the ability to understand feelings, cognitions, intentions and meaning in oneself and in others. The capacity to understand oneself and others is a key determinant of self-organisation and affect regulation. Eating disorders will be described as examples of different forms of impaired mentalizing, and such impairments are stated to be central psychopathological features in eating disorders. Psychotherapeutic enterprise with individuals with compromised mentalizing capacity should be an activity that is specifically focused on the rehabilitation of this function. Mentalization-based psychotherapy for eating disorders should also have a special emphasis on how the body is involved in representing mental states. The presentation will reflect the on-going work of manualizing MBT-ED.

Skårderud F, Fonagy P (2012) Eating disorders. In: Bateman A, Fonagy P (eds) Handbook of mentalizing in mental health practice. American Psychiatric Publishers, Washington DC, pp 347–383

W1-02-02 Mentalisation based treatment for adolescents with self harm: an RCT

Dr. T. Rossouw

Objective: We examined whether mentalization-based treatment for adolescents (MBT-A) is more effective than treatment as usual (TAU) for adolescents who self-harm.

Method: Eighty adolescents consecutively presenting to mental health services with self-harm and comorbid depression were randomly allocated to either MBT-A or TAU. Adolescents were assessed for self-harm, risk-taking and mood at baseline and at 3-monthly intervals till 12 months. Their attachment style, mentalization ability and borderline personality disorder (BPD) features were also assessed at baseline and at the end of the 12-month treatment.

Results: MBT-A was more effective than TAU in reducing self-harm, depression and borderline traits. This superiority was explained by improved mentalization and reduced attachment avoidance and reflected improvement in emergent BPD symptoms and traits.

Conclusion: MBT-A may be an effective intervention to reduce self-harm in adolescents.

W1-02-03 Evaluating the links between reflective functioning, empathy and perspective taking and their relevance to borderline personality features

Deborah Badoud

Reflective functioning (RF), which considers the capacity to understand intentional mental states as causally determining self and others' behaviours, is conceptualized as both linked to and independent from other socio-cognitive constructs such as empathy and

perspective-taking. Importantly, RF is argued to more readily account for the developmentally-acquired dysregulations of social cognition observed in clinical syndromes such as borderline personality disorder (BPD). The presentation will discuss the relationships of reflective-functioning to empathy and perspective-taking on the one hand, and to level of BPD features as well non-suicidal self-injury across risk periods of adolescence and early adulthood on the other hand.

W1-03 Psychotherapy in autism spectrum disorders—taking account of psychopathology

O. Bonnot, D. Cohen, F. Muratori, A. Narzisi, S. Viaux, M. Chetouani, T. Rabeyron, V. Bisson, C. Cuevas, B. Azurmendi

Chu and University of Nantes; Aphp, Upmc; Stella Maris and University of Pisa; Stela Maris and University of Pisa; Aphp; Upmc; University of Nantes; Chu De Nantes; Red De Salud Mental De Bizkaia (hospital De Bermeo)(*)

Overview: Communication impairments are core symptoms and a key developmental process in patients with Autism Spectrum Disorders (ASD). We will present three line of research in the field of psychopathology, understood as a psychiatric practice based on interaction between patients and health care professional.

1. We studied of early interaction showing how Social Signal Processing (SSP) can help in addressing this topic. Data from diverse sources (e.g. experiments, home movies) show how SSP was used to address synchrony between partners (e.g. infant, child, care giver, agent) and characteristics that participates to interpersonal exchanges (e.g. motherese, emotional prosody or faces). When studying interactive patterns in a home movie study, we found that deviant autistic behaviors appear before 18 months. Parents felt the lack of interactive initiative and responsiveness of their babies and try to increasingly supply soliciting behaviors by using mother motherese [1]. Also, in an experimental study, oxytocin shaped parental motion during father-infant interaction [2]. Finally, in the context of assessing mother-infant interaction in the context of a therapeutic trial, we created a multimodal setting for automated extraction of synchrony features that parallel clinical video rating [3].

Our research shows that SSP, developmental psychology and the study of early interaction should bind together as SSP appears to be a promising tool to investigate early psychopathology. DC, SV, MC, Paris, France

2. We examined the parental stress as an outcome measure after 6 months of treatment as usual (TAU) (n = 68 children) for whom information about Parental Stress (measured through the Parenting Stress Index – PSI) was available before (T0) and after six-months of TAU (T1). On the base of the clinical outcome, at T1 the sample was divided in a group of 37 children who improved on the ADOS-Calibrate Severity Score (Positive Outcome) and a group of 31 children without Positive Outcome (NPO). The two groups received comparable quantity of TAU in terms of weekly hours of treatment (t66 = 0.73, p = ns), but a significant difference between groups was found on the direct involvement of parents (t66 = 13.6; p = 0.048). Regarding the PSI, the group comparison at T0 revealed significant higher mean scores in the PO compared to NPO on Total Stress (P < 0.05), Parent Domain (P < 0.05) and Isolation (P < 0.005). Positive Outcome group showed significant lower mean scores at T1 than at T0, while in the NPO group no significant difference was found between T0 and T1. Correlation between PSI Total mean score and ADOS-CSS reaches a highly significant level in the PO group (r = -0.389; p = 0.017). FM AN, Pisa, Italy.

3. Music-Therapy (MT) has been used for decades with patient in Autism Spectrum Disorders. There is no rigorous assessment of MT in ASD. Our aim was to assess the efficiency of MT in ASD for clinical global impression, behaviour and communication impairments. We included 40 patients with ASD confirmed diagnose from 6 institutions in the west of France. Patients were randomized in two groups, first group ($n = 20$) was for MT and the second group ($n = 20$) was for Music Listening only with no psychotherapy. All patients had one session a week, lasting 30 min. When included in the study, we precede with a clinical assessment using Clinical Global Impression scale (CGI), Children with Autism Rating Scale (CARS), Aberrant Behaviour Check-List (ABC), and Vineland Scale for all patients. Evaluators did not know which group belong the patients (single blind design). After 30 sessions, assessment by scales was performed again. Our preliminary results suggest that MT is efficient general clinical appreciation but also in specific domains for patients with ASD. OB, EC, TR, FXV, Nantes, France.

4. Recognition of severe developmental disorders in children is much lower than severe mental diseases in adults, and very uneven across diagnoses that fall under this concept, the most recognized being ASD. Motivated by this matter, in 2011 the Public Mental Health Network implemented in each of the four health areas of Bizkaia an outpatient program for specific attention to infant severe mental disorders. We used consensus meetings to formalize coordination between different agents for ease early detection and referral; to unify diagnostic evaluation; computerization of documents to be used in the Program and Individualized Healthcare Plan; to create a register of incoming subjects in the Program and a database for future description and evaluation of evolution of these cases. We included in the database a sample of 125 cases in the program during 2013. We established the need to maintain and expand the capacity of attention to these disorders in a specific program given the volume of demand; coordination centered from infant-juvenile Mental Health Services with the different socio-educational-health agents results efficient, but is complicated and requires greater efforts of all parties involved; tests have proven useful for baseline comparison of the symptomatology and to measure subsequent evolution after the intervention. CJC, BSA, Bizkaia, Spain.

W1-03-01 Parental stress as an outcome measure in early intervention for autism spectrum disorders

Muratori Filippo, Narzisi Antonio

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Keywords: Autism, Parental stress, Outcome, Early treatment, Treatment as usual.

Background: Parenting stress can be defined as an 'aversive psychological reaction to the demands of being a parent and has been identified as one of the most common daily concerns faced by parents. According to Abidin's model, high levels of stress can lead to an increase in negative parenting, which in turn has direct impact on child's behaviour. Research has demonstrated that parents of children with autism spectrum disorders (ASD) experience higher levels of stress than parents of TD children and of children with other types of disabilities. Only few studies have examined the question of whether parental stress affects clinical trajectories of children during treatment.

Methods: We examine the parental stress as an outcome measure after 6 months of treatment as usual (TAU) in Italy. We have selected 68 children (57 male; 11 female; mean age: 2.94; SD 0.79; range age

1.58–5 years) for whom information about Parental Stress (measured through the Parenting Stress Index-PSI) was available before (T0) and after 6-months of TAU (T1). On the base of the clinical outcome, at T1 the sample was divided in a group of 37 children who improved on the ADOS-Calibrate Severity Score (Positive Outcome) and a group of 31 children without Positive Outcome (NPO). The two groups received comparable quantity of TAU in terms of weekly hours of treatment ($t_{66} = 0.73$, $p = ns$), but a significant difference between groups was found on the direct involvement of parents ($t_{66} = 13.6$; $p = 0.048$).

Results: Regarding the PSI, the group comparison at T0 revealed significant higher mean scores in the PO compared to NPO on Total Stress ($P < 0.05$), Parent Domain ($P < 0.05$) and Isolation ($P < 0.005$). Positive Outcome group showed significant lower mean scores at T1 than at T0, while in the NPO group no significant difference was found between T0 and T1. Correlation between PSI Total mean score and ADOS-CSS reaches a highly significant level in the PO group ($r = -0.389$; $p = 0.017$).

Discussion: Considering that the more stressed the family the greater was the improvement, we suggest that a child with an ASD is a source of stress for the family and that the high stress at the beginning of treatment can be considered as a parents' right reaction to this unexpected event. On the contrary, the low level of parental stress could be linked to a low awareness of the illness of their children so that these parents could be less active in being involved. Second, parent involvement is a key variable that could influence the positive outcome of children under treatment. This finding, although partially expected underlines the importance of involving parents who no longer have to be 'left out' of the treatment room. According to a recent meta-analysis, parent inclusion is as a crucial factor for enhancing treatment effectiveness. Parents must be viewed as important participants in the intervention, and therapist-delivered treatment programs must be accompanied by parent-coaching methods. Finally our results are on the same wavelength of a recent meta-analysis that support the positive impact of psychosocial interventions delivered by non-specialist providers as parents of children with ASD can be considered.

W1-03-02 Synchrony in early interaction and social signal processing methods: implications for psychopathology

David Cohen, Sylvie Viaux, Mohamed Chetouani

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<http://speapsl.aphp.fr>

Objectives: In the field of biology, the study of bonding has been renewed by the discovery of non-genetic transmission of behavioural traits through early mother–infant interaction and the role of stress hormones and oxytocin. However, the study of early interaction is complex. Our aim is to show how Social Signal Processing (SSP) can help in addressing some issues.

Methods: We summarized several recent works from our team using SSP and computational methods applied to early interaction and psychopathology.

Results: Data from diverse sources (e.g. experiments, home movies) show how SSP was used to address synchrony between partners (e.g. infant, child, care giver, agent) and characteristics that participates to interpersonal exchanges (e.g. motherese, emotional prosody or faces). When studying interactive patterns in a home movie study, we found that deviant autistic behaviors appear before 18 months. Parents felt

the lack of interactive initiative and responsiveness of their babies and try to increasingly supply soliciting behaviors by using mother motherese [1]. Also, in an experimental study, oxytocin shaped parental motion during father-infant interaction [2]. Finally, in the context of assessing mother-infant interaction in the context of a therapeutic trial, we created a multimodal setting for automated extraction of synchrony features that parallel clinical video rating [3].

Conclusions: SSP, developmental psychology and the study of early interaction should bind together as SSP appears to be a promising tool to investigate early psychopathology.

References:

1. Cohen D et al (2013) Plos One 8(5):e61402
2. Weissman O et al (2013) Biol Lett 9:e20130828
3. Avril et al (2015) Front Psychol (submitted)

W1-03-03

Simple blind randomized controlled trial of music therapy versus music listening in patients with autism spectrum disorders regarding efficiency in behaviour and communication disorders. Preliminary results

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Background: Music-Therapy (MT) has been used for decades with patient in Autism Spectrum Disorders. There is a tremendous amount of literature, mainly theoretical or describing case reports suggesting a clear efficiency of this technique of psychotherapy. Despite this large literature there is no rigorous assessment of MT in ASD. Medical indications are now, based on randomized controlled trial (RCT) results. A non-RCT evaluated treatment method is at risk to be considered inefficient. There are many researches in neuroscience suggesting that music by itself may be helpful for patients with ASD. We think that it is important to assess that psychotherapy with Music, Music Therapy, and compare to Music Listening with no intervention.

Objective was to assess the efficiency of MT in ASD for clinical global impression, behaviour and communication impairments.

Method: We included 40 patients with ASD confirmed diagnose from 6 institutions in the west of France. Patients were randomized in two groups, first group (n = 20) was for MT and the second group (n = 20) was for Music Listening only with no psychotherapy. All patients had one session a week, lasting 30 min. When included in the study, we precede with a clinical assessment using Clinical Global Impression scale (CGI), Children with Autism Rating Scale (CARS), Aberrant Behaviour Check-List (ABC), and Vineland Scale for all patients. Evaluators did not know which group belong the patients (single blind design). After 30 sessions, assessment by scales was performed again. **Analysis and Results:** We analysed efficiency in general and in 3 main domains: (1) behaviour, including self-injury behaviour; (2) Autonomy and (3) communication disorders and impairments. Statistical analysis used both parametric and non-parametric test.

Discussion and conclusion: Our preliminary results are the first RCT with single blind examination design UN MT. They strongly suggest that MT is efficient general clinical appreciation but also in specific

domains for patients with ASD. Further studies are necessary in this field to demonstrate and show the benefits of this type of psychotherapy in autism spectrum disorders.

W1-03-04

Evaluation of an outpatient intensive care Program in Public Mental Health Services in Bizkaia (Basque Country) for children with severe developmental disorders: systematization, coordination and baseline for measuring evolution

Begoña Solana Azurmendi (Psychiatrist), Cristina Jorquera Cuevas (Psychologist), Fernando Gonzalez Serrano (Psychiatrist), Francisco Vaccari Remoulins (Psychiatrist), Ana Nieto Perez (Psychologist), Consuelo Panera Uribe (Psychologist), Gemma Cabus Piñol (Psychiatrist)

Bizkaia Mental Health Network, Basque Health Service Osakidetza, Spain

Background: Recognition of severe developmental disorders in children is much lower than severe mental diseases in adults, and very uneven across diagnoses that fall under this concept, the most recognized being Autism Spectrum Disorders. Motivated by this matter, in 2011 the Public Mental Health Network implemented in each of the four health areas of Bizkaia an outpatient program for specific attention (evaluation, intensive intervention and coordination of available resources) to infant severe mental disorders. Given the lack of previous experiences in our context, there was the need for developing, coordinate and systematize this Program to achieve optimum efficiency.

Methods: Consensus meetings to formalize coordination between different agents for ease early detection and referral; to unify diagnostic evaluation; computerization of documents to be used in the Program and Individualized Healthcare Plan; to create a register of incoming subjects in the Program and a database for future description and evaluation of evolution of these cases.

Results: We reached agreements with the different agents involved regarding facilitating early detection and referral pathways to the Program; consensus on two assessment tests that provides baseline to assess symptoms, affected areas and clinical course of these cases (GARS-2 and Merrill-Palmer-R); we included in the database a sample of 125 cases in the program during 2013.

Conclusions: We established the need to maintain and expand the capacity of attention to these disorders in a specific program given the volume of demand; coordination centered from infant-juvenile Mental Health Services with the different socio-educational-health agents results efficient, but is complicated and requires greater efforts of all parties involved; tests have proven useful for baseline comparison of the symptomatology and to measure subsequent evolution after the intervention.

W1-04

Children and adolescents' psychosocial psychopathology in South East Europe

Dimitris C. Anagnostopoulos

National and Kapodistrian University of Athens, Athens, Greece

Introduction: Since the early 90's the Balkan Peninsula is facing continuous, huge, transformations in every aspect of social life. This

on-going process had serious implications on the mental health of children and adolescents both on their psychopathology and on the ways that they are treated.

Through this period of time, a question has risen concerning the extensive maltreatment of children and the consequences of this phenomenon to their mental health. Also, there is a great debate on the efficacy of the measures which have been implemented by the psychiatric services under the directions of the state health policies, in the different countries of the area.

Along with the above, one more crucial issue for the children and adolescents' mental health is the observed changes in the everyday clinical practice. New forms of psychopathology, aggressive behaviours, and borderline conditions tend to be the majority of cases. Especially, in the adolescence new types of acting out and addictive behavior came on, e.g. pathological gambling. This reality threatens the boundaries and strengths of the existing mental health policies and puts under serious question the ability of the psychiatric services to meet the new needs.

The aim of this symposium is to present new data on these issues from Serbia, Bulgaria and Greece, continuing the discussion which started in Dublin's congress. Emphasis is given to the improvements which have been done, to the risk and resilience factors which have been recorded and to the lessons from the accumulated experience, dealing with these issues for a long period of time, which could be useful for other parts of Europe, especially nowadays in the current conditions of social global crisis.

Keywords: Psychosocial psychopathology, Social crisis, Maltreatment, Gambling, Borderline condition, South East Europe, Balkans, Risk factor, Resilience, Child abuse, Neglect, Prevention.

Design of Symposium's proposal

Coordinators:

Vaska Stancheva-Popkonstandinova,

Dimitris Anagnostopoulos

W1-04-01

The system of reporting on child protection from abuse and neglect in Serbia health system

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In Serbia, a country that has undergone significant transitional and socio-political turbulence, efforts against child maltreatment have travelled a step-by-step journey, with some important milestones already achieved, and many more to aspire to. The special protocol for the health care system to protect children from abuse and neglect protection against abuse and neglect was implemented in 2009. As detection and registration is the significant first step leading to further interventions, central national-level database model has been created and the modern, pertinent tools for collecting and reporting data by the expert teams were developed. During 2013–2014 the piloted set of data was created and established an adequate, modern and sustainable system for data collection and reporting, with creating a national-level database by including into the reporting system healthcare institutions from the Plan of Network of the Republic of Serbia. Higher-quality technical and operative work of teams in health care in the area of protection of children from abuse and neglect were enhanced particularly in collecting, using data and reporting on child abuse and neglect. According to the data from the registry, since October 2013

and up to the end of October 2014, first sixty six institutions responded by inputting 699 questionnaires and registering 667 of children with suspect for abuse and neglect (637 were registered once, and 30 were registered more than once—25 twice, 3 of them three times and 2 of them four times). All the relevant healthcare institutions have been informed about the reporting obligation, agreed form, and database/monitoring system. In order to improve all the elements of the reporting system, networking should be constantly ensured and developed, specialized body and new institutions established, with continuous supervision at national and local level.

W1-04-02

Prevention of child abuse and neglect—cross-cultural perspective

Vaska Stancheva-Popkonstandinova

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Child abuse and neglect (CAN) is a serious public health problem worldwide, with long lasting harmful effects. Short and long-term consequences of child abuse in mental health are well documented in the scientific literature.

Prevention of CAN is a complex interdisciplinary area and a combination of activities of various kinds is needed to be implemented at general population, risk groups and affected children and their families. This paper presents the current trends in the policies and practices for prevention of child abuse and neglect. The stress is given on legislation, surveillance mechanisms, help-lines, interagency co-operation and the cross-cultural comparison of existing policies and practices in the implementation of preventive activities. For the purpose of this study; that is to explore the experts' opinions and suggestions, a questionnaire was sent (electronically) to professionals from Europe, USA, Australia (N = 60). The questionnaire includes 6 close and 4 open-end questions concerning the development of prevention of child abuse and neglect during last decades. The case studies of good practices in different areas of prevention of child abuse and neglect, as well as cross cultural comparison for advantages in prevention are presented. Even that in the recent years, there is a strong movement towards policy development in the field of child abuse and neglect, in many countries still there is a gap between policies and practices for effective dealing with child abuse and neglect.

W1-04-03

Adolescents' gambling during the crisis in Greece

Helen Lazaratou, D. Anagnostopoulos, M. Paleologou, L. Peppou, M. Malliori, M. Economou, G. Papadimitriou, Ch. Papageorgiou

National and Kapodistrian University of Athens, Greece

Gambling once thought to be strictly an adult activity, has become increasingly popular among adolescents and problem gambling is considerably higher among the youths than among adults, worldwide. This emerging public health concern, amidst the worst economic crisis in Greece, in conjunction with the lack of research in this area in our country necessitates the epidemiological investigation of adolescents' gambling. Consequently, the A' Department of Psychiatry, University of Athens, in collaboration with the Greek Organization of Football Prognostics (OPAP S.A.) has recently conducted a cross-sectional survey to provide the first prevalence estimates of Gambling and Pathological Gambling among adolescents in Attica and to explore its correlates with sociodemographic characteristics, economic factors and presence of psychopathology. A

self-administered set of questionnaires was distributed to 2159 students, attending 2nd grade of junior and senior high school, in 51 public and private schools in the broader Attica region. It included the Canadian Adolescent Gambling Inventory, the Strengths and Difficulties Questionnaire and a sociodemographic form; the DSM-IV-MR-J checklist for pathological gambling was also incorporated in order to validate the CAGI in the Greek adolescent population. The results indicate that 69.6 % of students report having engaged in some form of gambling during the past year, while 19.3 % experiences gambling-related problems and 11.1 % manifests pathological gambling. Survey findings reveal that adolescents manage to participate, to some degree, in all forms of gambling, the most prevailing of them being a dare or challenge, lotteries and sports betting. Pathological gambling seems to be in line with the presence of other mental health problems and especially with symptoms of conduct disorder, attention deficit hyperactivity disorder and social dysfunction.

W1-04-04 **Emerging risk-factors for adolescent psychopathology in times of psychosocial crises**

Dimitris Anagnostopoulos, Helen Lazaratou, L. Peppou, Ch. Papageorgiou

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It is a known fact that times of economic crisis have a negative impact on mental health. The current crisis is not only financial, but also a social and moral crisis and has affected in a different degree all European countries. Consequences of the financial downturn on health outcomes have begun to emerge. This recession has led to an increase in poor health status, raising rates of anxiety and depression among the vulnerable populations. The incidence of communicable diseases (e.g. HIV) along with the rate of suicide has increased significantly. The recession has also driven structural reforms, and affected the priority given to public policies. Europe is suffering record levels of long-term and youth unemployment, with a generation of young people facing years of joblessness to come. The proportion of young people who are neither in employment, education, nor in training (NEET) continues to increase. Job insecurity, unemployment, the increase of social inequalities, poverty, social exclusion the inability to control one's own life, and uncertainty for the future pushes the great majority of young people into situations causing deep psychological pain and distress. Negative consequences can be seen both in the child psychiatric services provision system and the broader environment in which youths are growing up (family, school, social models and values). The child and adolescent mental health services face a situation of regression in terms of development and adequate staff, a large number of units have suspended their operation or are under the threat of it. Changes in socio-economic conditions, the disintegration of institutions, continuous frustration, lack of boundaries, the confusion of roles, serious conflicts, and the discord in family life—all undermine the enabling role of the family framework. School and educators are being constantly undermined and devalued. In general, there are no models and idols worthy of stimulating the healthy processes of identification and idealization. On the contrary, the promoted value is individualism and resorting to personal solutions. A qualitative change in the severity of psychopathology dealt with in everyday clinical practice has been recorded. The cases of psycho-social problems have risen as well as conduct disorders, suicide attempts, school refusal, bullying, use of illegal addictive substances, and family discord. Borderline states, substance abuse, bullying and racist-discriminating behaviours are now common. Acting out behaviour tends to become the main mechanism for the expression of adolescent psychopathology, both at an individual and a social level.

W1-05 **Who and IACAPAP initiatives in worldwide capacity strengthening in child mental health services**

J. Chilton, C. Servili, B. Falissard, H. Klasen

Yale Child Study Center, New Haven, USA; World Health Organization, Geneva, Switzerland; IACAPAP and Université Paris-sud, Paris, France; Leiden University Medical Center, Leiden, The Netherlands

Symposium Overview

Background: Child and adolescent mental health (CAMH) problems are common, serious and treatable. Robust evidence-based treatments have been developed for most CAMH problems in high income settings, but in low and middle income countries (LAMIC) there is a huge “mental health treatment gap”, between those needing treatment and those receiving it. In this symposium we describe some initiatives of IACAPAP and WHO to assist local care providers in addressing CAMH needs worldwide.

W1-05-01 **WHO's mhGAP: the child modules-Chiara Servili, WHO**

WHO's Mental Health Gap Action Programme (mhGAP) integrates a package of basic interventions for priority mental, neurological, and substance use disorders, including childhood-onset conditions, into primary and secondary care through the adoption of task-sharing and task-shifting approaches and has been successfully implemented in more than 60 countries. Recently updated mhGAP guidelines for assessment and management of emotional disorders, behavioural disorders and developmental disorders in children and adolescents will be presented, along with findings of pilots testing mhGAP capacity building tools in school and primary health care settings in LAMIC. The availability of skilled professionals in secondary and tertiary services, who can support and supervise primary health workers in delivering mhGAP's interventions for children and adolescents, is critical and has been reported among major barriers encountered in the adoption and scale up of child mental health mhGAP modules in countries.

W1-05-02 **Expansion of the IACAPAP Textbook into a Comprehensive, Customizable, Virtual Curriculum-Julie Chilton, Yale Child Study Center**

International organizations such as IACAPAP have recognized the need to assist the capacity building for child mental health professionals worldwide and are developing a range of excellent free on-line training resources. The IACAPAP textbook, already widely used in low and high income settings, is now being expanded to include teaching and learning resources such as downloadable power-point presentations, clinical exercises, patient modules and end of chapter questions. These resources will provide evidence-based tools to teach CAMH with minimal preparation by the lecturer, so less time is spent re-creating the wheel and more time can be devoted to actual class time.

W1-05-03**Essentials of Child and Adolescent Psychiatry across the world” a MOOC (Massive Open Online Course) proposed by the IACAPAP-Bruno Falissard, Université Paris-Sud**

The MOOC is a new IACAPAP initiative and will take place twice a year beginning in 2015. Each session will last approximately 5 weeks and require about 6 h of online learning per week. The MOOC will be divided into 20 short video modules (about 10–15 min each) covering the whole area of CAMH on an introductory level and can be followed by students around the world. Each video is followed by some questions to emphasize the important content with extra quizzes at the end of the week. There will also be on-line interactions with other students and teachers and peer grading. By the end of the MOOC, it is possible to earn a certificate for completion of the course.

W1-05-04**IACAPAP Certificate of Basic Child Mental Health-Henrikje Klasen, Leiden University Medical Center**

This credential is a more advanced diploma than the MOOC certificate, as it includes clinical training to integrate CAMH knowledge into daily practice. The accredited “IACAPAP certificate for basic child mental health” is an additional qualification for pediatricians and psychiatrists, which can be acquired in their own country through a mix of face-to face and on-line teaching as well as practical assignments. The availability of an accredited certificate would guarantee standards.

W1-06-01**Epidemiology of non-suicidal self-injury and suicidal intent in a sample of Austrian Teenagers**

M. Zeiler, J. Philipp, G. Wagner, K. Waldherr, N. Martina, W. Dür, A. Karwautz

Ludwig Boltzmann Institute Health Promotion Research, Vienna, Austria; Medical University of Vienna, Vienna, Austria; Ferdinand-Porsche-Distance Learning University of Applied Science; Ludwig Boltzmann Institute Health Promotion Research

Non-suicidal self-injury (NSSI) as well as suicidal behavior disorder (SBD) among adolescents have been recognized as significant mental health problems, not least through their inclusion in DSM 5 as “conditions for further study”. However, little is known about the prevalence of NSSI and SBD among adolescents so far.

The Mental Health in Austrian Teenagers (MHAT) Study is the first epidemiological study in Austria on psychiatric disorders in childhood and adolescence based on a large ($N > 3600$, 55 % females) population-based sample of adolescents ages 10 to 18 years. In an initial screening stage, behavioral and emotional problems were assessed using the Youth Self-Report (YSR). Two items of the YSR aim at assessing deliberate self-injury and suicidal intent. Health-related quality of life (HrQoL) was assessed by the KIDSCREEN questionnaire. Adolescents screened at risk for any psychiatric disorder (22.8 %) are further contacted for a structural diagnostic interview to obtain point- and life-time prevalences of psychiatric disorders including NSSI and SBD using the proposed diagnostic criteria.

Screening results revealed that 7 % [CI 95 % 6.2; 7.8] of adolescents engaged “sometimes” and 3.4 % [CI 95 % 2.8; 4.0] engaged

“often” in self-injury behaviors. The prevalence of suicidal intent was quite similar (“sometimes”: 6.8 % [95 % CI 6.0; 7.6]; “often”: 1.9 % [CI 95 % 1.4; 2.4]). Participants reporting either self-injury or suicidal intent had much higher levels of general psychopathology in terms of the YSR syndrome scales than those who did not report any self-injury and suicidal intent (medium to large effect sizes: $d = 0.54$ to 1.14, all p -values < 0.001). Of those participants who reported to have a diagnosed psychiatric disorder, 62.6 % [95 % CI 53.0; 72.2] reported either self-injury behavior or suicidal intent. Furthermore, participants reporting self-injury or suicidal intent had a markedly reduced HrQoL in all assessed dimensions (effect sizes range from $d = 0.30$ to 1.10, all p -values < 0.001).

Data from the screening stage indicate that the prevalence of deliberate self-injury and suicidal intent is about 10 % in the Austrian population of adolescents and that such behaviors are highly associated with a broad pattern of psychopathology and reduced quality of life. The present results will be supplemented by data from structural clinical interviews, which will be available by spring 2015, and which will provide the prevalence of full-syndrome NSSI and SBD as well as comorbidities, age-at-onset and treatment seeking behavior.

W1-06-02**Child and adolescent psychiatry in suicide preventing**

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Epidemiological studies have found that in developed countries approximately 10 % of children and adolescents have mental disorders; in developing countries, the overall frequency of disorders is slightly higher. It should be noted that since many of mental disorders are characterized by recurrent course, their cumulative prevalence may be significantly higher than point prevalence, revealed in a single sectional study; it was set in the longitudinal epidemiological studies conducted in recent years.

It is known that in both developed and developing countries, the prevalence of mental disorders in children and adolescents is much higher than the possibility of children and adolescent mental health services. Given the relatively high prevalence of mental disorders among Russian children and adolescents, the problems of mental health services of children and adolescents at the federal and regional levels, and in particular, expressed until recently stigmatization of psychiatry in the Russian Federation, it can be assumed that the provision of child and adolescent mental health services of the population of Russia is far from optimal. World Health Organization experts are considering suicide rate as one of the final results of the mental health of children and adolescents at the national, regional and territorial level. The high frequency of completed suicides of minors in the Russian Federation is particularly worrisome professionals and the general public; for several years it remains one of the highest in the world.

The statistical analysis of the time trends in registered psychiatry morbidity in Siberian Federal District from 2009 to 2012 and the relation of registered psychiatry morbidity to the prevalence of child and adolescent suicide were fulfilled. Both general and primary morbidity in Siberian District were higher than overall rates in the Russian Federation. Registered morbidity in Siberian Federal District was closely related to the prevalence of child and adolescent suicide: the more registered psychiatric disorders and the higher rate of primary morbidity in the region, the less completed suicide rates of

10–19-year-olds in the region. The identification of mental disorders in children explained more than 40 % of the variance in child suicide rates across the twelve Siberian regions, whereas registered psychiatric morbidity in adolescence explained more than 57 % of the variance in adolescent suicide rates.

This confirms the opinion of experts on the role of children and adolescent mental health services at national, regional and territorial level in suicide prevention and provides a strong case for strengthening of these services.

W1-06-03

Protocol to assess adolescents with high suicide risk in a hospital setting in Barcelona (Spain)

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Introduction: Suicide is the second cause of mortality in adolescents between 15–19 years of age, after road accidents. ‘Suicidal behavior’ in general terms include patients who have suicidal ideation or make threats of suicide, or have done preparatory acts toward imminent suicidal behavior, suicide attempt or completed suicide. The Hospital Sant Joan de Déu in Barcelona (Spain) has a new mental health team specializing in assessing adolescents with suicidal behavior, and in 1 year they have seen more than 230 cases. These patients require a very complex assessment as they have a very high risk to repeat the suicidal behavior and of not engaging with community services. The aim of this specialized team is to reduce the risk of these patients repeating the suicidal behavior, but also to ensure the engagement with services, reduce the service costs and prevent the emotional burden of professionals involved in their care.

Design: Each adolescent that has presented to the emergency service because of suicidal behavior will be admitted to the pediatric ward for at least 24 h. During this time the specialized mental health team will assess the patient and design a thorough discharge plan which includes ensuring follow-up by community services within 72 h. Our hypothesis is that this pro-active assessment and plan will reduce the suicidal behavior of the young person after the initial episode.

Methodology: This is a prospective study of all patients that attend because of suicidal behavior and follow-up for up to a year. We evaluate the engagement with services post-discharge from hospital and the number of suicidal behavior episodes after the initial assessment.

Results and conclusions: 41 % of patients that have been assessed by the specialized team had previously shown suicidal behavior. Our results show that a pro-active assessment facilitates the engagement and follow-up by services. There is a specific group of patients that have a higher tendency to repeat the suicidal behavior within a year.

References:

1. Nock M, Greif J et al (2013) Prevalence, correlates and treatment of lifetime suicidal behavior among adolescents. *JAMA Psychiatry* 70(3):300–310
2. Hawton K, Saunders K, O’Connor R (2012) Self-harm and suicide in adolescents. *Lancet* 379:2373–82
3. Gould M, Greenberg T et al (2003) Youth suicide risk and preventive interventions: a review of the past 10 years. *J Am Acad Child Adolesc Psychiatry* 42(4):386–404
4. Miranda R, Shaffer D (2013) Understanding the suicidal moment in adolescence. *Ann NY Acad Sci* 1304:14–21

W1-06-04

Effectiveness of Cognitive Behaviours Therapy (CBT), in clinically depressed adolescents versus Treatment As Usual (TAU)

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Depression in adolescents is a vast societal problem because of the prevalence, the burden of the illness, the chronicity, and the high number of suicides. Forty to 90 % of the depressed adolescents have a co morbid disorder such as anxiety (25 %), OCD (15 %), and ADHD or a behavioural disorder (25–40 %). Therefore, an effective intervention for clinical depression seems essential. International studies have shown that Cognitive Behavioural Therapy (CBT) is effective in reducing depressive symptoms in depressed adolescents. However, there is no consensus on the degree of effectiveness. Effect sizes of meta-analyses range from 0.34 (Weisz et al., 2006) to 0.53 (for CBT; Klein et al., 2007).

Within intervention research with depressed adolescents, little is known about possible moderators of treatment outcome. Many authors mention the necessity to investigate these variables (David-Ferdon and Kaslow, 2008; Weisz et al. 2006). Since comorbidity in depressed adolescents is high, it could be an important factor that influences treatment outcome.

The D(o)epression course is an individual CBT program, a revision of the group protocol ‘Coping with depression course for Adolescents (CWD-A)’ (Clarke et al., 1990). Results repeatedly show that the CWD-A is effective (e.g. Clarke et al., 2002). However, the CWD-A is only regarded as probably efficacious (David-Ferdon and Kaslow, 2008), it’s effectiveness has not been investigated yet.

In this multi-site, randomised controlled trial individual CBT was compared to care as usual. Recruitment was done in 14 specialized mental health care institutions in the Netherlands. In total, 100 adolescents (12 to 21 years old) were included and 4 assessments were conducted (pre, post, 6 months and 1 year follow-up). Assessments consist of questionnaires and diagnostic interviews with the parent, the adolescent and the therapist.

Aim of this study was to test the effectiveness of a specific CBT program for adolescents diagnosed with depression under rigorous conditions, within routine care provided by professionals already working in mental health institutions. In this presentation, the first and preliminary pre-post results on effectiveness of this individual CBT program for clinically depressed adolescents will be presented. Also findings on co morbid disorders as moderators will be presented. We are still collecting data for this study. Therefore we cannot specify the results yet. The findings will also be illustrated with a case study. Data will be available in May 2015.

W2-01

Novel strategies to improving outcomes in difficult cases with OCD and related disorders

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Overview: A substantial proportion (approximately 30–40 %) of young people with OCD do not achieve sufficient symptom relief after receiving evidence based-treatment. Various international guidelines recommend cognitive-behavior therapy (CBT) as a first-line treatment in pediatric OCD and body dysmorphic disorder (BDD). However, there is little evidence to guide clinical decision making in CBT-resistant cases. Novel strategies to enhance the outcomes of CBT are sorely needed, particularly in patients with complex comorbidities like Autism Spectrum Disorders. For BDD, a frequently undetected and yet disabling OCD-related disorder, the evidence is particularly weak. This symposium will explore some recent European efforts to increase the evidence-base for the management of treatment resistant and complex cases of the OCD spectrum. Dr. Skarphedinsson (Oslo, Norway) will present the results of a large, 2-phase multi-national trial (NordLOTS) testing the effectiveness of sertraline (SRT) versus continued CBT in children and adolescents that did not respond to an initial course of CBT. Both the main outcomes and predictors of outcome will be presented. Dr. Wolters (Amsterdam, Netherlands), will present the rationale, development and results of a study of Cognitive Bias Modification training in adolescents with OCD. Dr. Jassi (London), will present a series of studies looking at the particular characteristics and challenges posed by comorbid ASD in youths with OCD as well as outcome data from a randomized controlled trial. Finally, Dr Fernandez de la Cruz will present the results of the worlds' first randomized controlled trial of CBT for adolescents with BDD.

W2-01-01

Continued cognitive-behavior therapy versus sertraline for children and adolescents with obsessive-compulsive disorder that were non-responders to cognitive-behavior therapy: Treatment outcome and moderator analysis

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Our aims were to investigate the effectiveness of sertraline (SRT) versus continued CBT in children and adolescents that did not respond to an initial course of CBT and to evaluate whether the presence of tic disorder is negatively associated with SRT outcomes, but not with continued CBT. The study was a part of the Nordic Long-Term OCD Treatment

Study (NordLOTS). Intent-to-treat sample included 50 participants (classified as non-responders to CBT following 14 weekly sessions), age 7–17 years, with DSM-IV primary OCD, mean age 14.0 (SD = 2.7) and 48 % (n = 24) males randomized to CBT (n = 28) or SRT (n = 22). Primary outcomes were the CY-BOCS total score and clinical response (CY-BOCS < 16). Twenty-one of 28 participants (75 %) completed continued CBT and 15 of 22 participants (69.2 %) completed SRT. Planned pairwise comparison of the CY-BOCS total score did not reveal a significant difference between the treatments (p = 0.351). Within-group effect sizes were large and significant across both treatments. Twelve (24.0 %) participants were diagnosed with comorbid tic disorder, with seven receiving continued CBT and five SRT, respectively. In patients without tic disorder, results showed no significant between-group differences on average CY-BOCS scores. However, in patients with comorbid tic disorder, those who received SRT had significantly lower average CY-BOCS scores when compared to those who received continued CBT. The large within-group effect sizes suggest that continued treatment for CBT non-responders is beneficial. However, there was no significant between group differences in SRT or continued CBT at post-treatment. Children and adolescents with OCD and comorbid tic disorder, who are non-responders to an initial 14-week course of CBT, may benefit more from a serotonin reuptake inhibitor (SRI) than from continued CBT.

W2-01-02

Improving treatment: supplementing cognitive behavioral therapy with a cognitive bias modification training for children and adolescents with OCD

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The first line treatment for children and adolescents with OCD is Cognitive Behavioral Therapy (CBT). However, as response rates vary between 40 and 65 %, there is substantial room for improvement. Recently, Cognitive Bias Modification-Interpretation (CBM-I) training paradigms that target misinterpretations in anxiety have been developed, with promising effects. Furthermore, CBM-I training paradigms can be completed online without support of a therapist, and are easy to implement. To examine if we can improve treatment by adding CBM-I to CBT, we developed a CBM-I training for children and adolescents with OCD. In a pilot study we examined the added value of the training to CBT in adolescents with OCD. This small randomized controlled trial was suggestive, although not conclusive regarding the promising additive effects of the CBM-I training (Salemink, Wolters and De Haan, submitted). Since then, the training has been modified on different aspects to increase the fit between the content of the training and specific OCD complaints of the children. Effects of the adapted training are now examined in a larger, multi-center randomized controlled trial. In this recent study, the CBM-I training is offered during the (natural) waitlist period before CBT. This implies that if CBM-I is effective, children can already benefit from the training before CBT has started. Second, we hypothesize that the CBM-I training may have a positive effect on the subsequent CBT. Together, this may result in a more efficient and effective treatment. In our study, children with OCD are randomized allocated

to either CBM-I (4 weeks) followed by CBT, or waitlist (4 weeks) followed by CBT. At this time, 26 children completed the first part of the study (CBM-I $n = 13$, waitlist $n = 13$). Results showed a trend for a decrease in OCD severity (CY-BOCS) in the CBM-I condition ($p < .10$), but not in the waitlist condition. These preliminary results suggest that a pre-treatment CBM-I training might be effective for children with OCD. In this presentation, we will present our CBM-I training (rationale and development), results of the pilot study and preliminary results of our recent study.

Keywords: OCD, Treatment, Cognitive bias modification.

W2-01-03

OCD in young people with ASD: presentation and treatment issues

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Obsessive Compulsive Disorder (OCD) is frequently reported in both children and adults with Autism Spectrum Disorders (ASDs) (McDougle et al., 1995; Russell et al., 2005 and Mack et al., 2010). There is often confusion in disentangling OCD compulsions from repetitive behaviours in ASD. However, symptoms of OCD found in the ASD population are comparable to those without ASD, with a few exceptions (Russell et al., 2005). Therefore, CBT is the recommended treatment for this group. This talk will present a series of studies exploring this further. The first study shows CBT outcomes for young people with ASD and OCD are significantly worse than for those without ASD (Murray et al., 2015). The second study will present the outcomes of the first RCT of CBT for adolescent and adults with ASD and OCD, indicating CBT can be an effective treatment (effect size of 1.1). However, this study also found CBT was not significantly superior to a control anxiety management treatment (Russell et al., 2013). This raises the question of what the important elements are for a psychological treatment for OCD in this group. These studies highlight that whilst there is a potential benefit of CBT, there is still work needed to develop this for the OCD ASD population. Other characteristics of this group will be discussed to highlight areas of potential development needed to enhance treatment outcomes for this group. The talk will conclude with a proposal of how this treatment can be further refined and a plan for future studies to evaluate this.

W2-01-04

A pilot randomized controlled trial of cognitive-behavior therapy for adolescents with body dysmorphic disorder

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Body dysmorphic disorder (BDD) is a chronic psychiatric disorder characterized by excessive preoccupation with perceived defects in physical appearance. Onset of the disorder is typically in adolescence. However, evidence-based treatments are yet to be developed and formally tested in this age group. We designed an age-appropriate cognitive-behavior therapy (CBT) protocol for adolescents with BDD. The treatment involved the family or carers when appropriate. The main aim of the study was to test its efficacy in a pilot randomised controlled trial (RCT). A secondary aim was to evaluate treatment satisfaction and acceptability. A sample of 30 adolescents aged 12 to 18 years meeting diagnostic criteria for BDD and their families were randomly assigned to either 14 sessions of CBT or a control condition consisting of written psychoeducation materials and weekly telephone monitoring. Blind evaluators assessed the participants at baseline, session 7 (mid-treatment), session 14 (post-treatment), and two months after the end of treatment. The primary outcome measure was the Yale-Brown Obsessive–Compulsive Scale Modified for BDD, adolescent version (BDD-YBOCS-A). Participants randomized to CBT showed a significantly greater improvement than those randomized to the control group, both at post-treatment and at 2-month follow-up. Improvements were also seen on a range of secondary measures, including insight, depression, and quality of life at post-treatment, although outcomes in these measures were more modest at follow-up. Both patients and their families deemed the treatment as highly acceptable. Developmentally tailored CBT with parental involvement is a promising intervention strategy for young people with BDD; larger trials are warranted.

W2-02

Treatment resistance and clozapine use in young people with psychosis: findings, across European countries

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W2-02-01

Treatment resistance and clozapine use in early-onset psychosis: concepts, findings, and challenges

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* Speaker

Clozapine is an antipsychotic agent known to be very effective in the treatment of schizophrenia. Compared to classic antipsychotic drugs, clozapine has a lower risk of extrapyramidal symptoms but a marked risk of other significant side effects being life-threatening

agranulocytosis the most severe. Despite the overwhelming evidence of its effectiveness in treatment-resistant psychoses (TRP), the use of clozapine in children and adolescents is still limited because of this adverse tolerability profile and the European guideline requirement of two adequate trials with antipsychotics before prescribing this drug. To date, data on the actual prevalence of TRP in European samples of first episode early-onset psychosis (EOP), on prescription trends (including polypharmacy, clozapine use or time to clozapine initiation), and on demographic, clinical, cognitive or biological features associated with a higher risk of presenting with later TRP is still scarce.

The main objective of this symposium is to reflect on clozapine place in therapy in child and adolescent psychiatry and to discuss TRP prevalence and clozapine's prescribing trends in European countries. Dr. Covadonga M. Diaz-Caneja will introduce the concept of TRP—as a proxy of poor outcome—in young people, and will discuss the potential clinical relevance of identifying predictors of TRP in youth with first episodes of EOP. Specifically, a comprehensive overview of recent studies on predictors of treatment outcomes in EOP will be presented. Seventy-five original articles on longitudinal naturalistic studies were included in the review. Literature on predictors of treatment outcomes in EOP was scarce (e.g., one study on treatment adherence, one study treatment discontinuation) and only one study analyzed prescription of clozapine as an outcome (which was reportedly associated with longer duration of index hospitalization and being male). Research based on long-term longitudinal studies and with potential for replication could help identify subjects with EOP at higher risk of poor outcome in whom more intensive and earlier interventions would be warranted. This type of research across different European countries will be then presented in the second part of the symposium.

W2-02-02

Prevalence and predictors of treatment failure, treatment resistance and clozapine use in early-onset psychosis: findings from a historical clinical cohort study in UK

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* Speaker

Approximately one third of adults with psychosis have will fail to respond to their first and second trial of antipsychotic medication. These individuals are at high risk of developing profound and lifelong psychiatric disability. Currently, one in five people who are diagnosed with a psychotic disorder will present with their first episode before age 18 (i.e. early-onset psychosis). To date, no studies have described the demographic and clinical characteristics of adolescents with a first-episode psychotic disorder who fail to respond to successive courses of antipsychotic treatment and meet criteria for treatment failure/resistance.

Dr. Johnny Downs will present preliminary findings from a large historical clinical cohort study in the UK of 315 children and adolescents, aged 10 to 17 years, with a first-episode psychotic disorder.

Using anonymised electronic health records, data will be presented on (i) antipsychotic use in this sample, (ii) the prevalence of treatment failure/resistance and (iii) the demographic and clinical factors at first presentation to mental health services, derived from multivariable models, that are significantly associated with adolescent onset psychosis and failure/resistance. These findings will aid the identification of adolescents on the pathway to treatment failure/resistance whilst in the first phases of their psychotic disorder. This will be especially valuable to clinicians working within adolescent early onset psychosis services. The study findings have the potential to guide tailored interventions in those patients deemed to be at higher risk of developing treatment failure and resistance.

W2-02-03

Prevalence and predictors of clozapine use in early-onset psychosis: findings from a prospective clinical cohort study in Spain

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* Speaker

As aforementioned, long-term longitudinal studies with potential for replication might help identify subjects with EOP at higher risk of poor outcome in whom more intensive and earlier interventions would be warranted. Dr Laura Pina-Camacho will present data from a 2-year, prospective, longitudinal study in Spain of nearly 200 patients (age 9–17 years, 32.7 % female), with a DSM-IV diagnosis of first-episode psychosis. Specifically, data on the naturalistic psychopharmacological treatment administered through the 2-year follow-up period will be presented, including data on antipsychotic prescription, discontinuation rates, reasons for treatment changes, and adverse effects, clozapine use and features at first psychotic presentation that might be associated with later prescription of clozapine.

Second-generation antipsychotics, especially risperidone, quetiapine, and olanzapine, were the most commonly used antipsychotics through the follow-up. Reasons for treatment discontinuation (e.g. adverse reaction, insufficient response, other reasons) did not differ significantly between antipsychotics. None of the patients were treated with clozapine at baseline whereas 10 % of patients were treated with this drug over the follow up, either in monotherapy or in combination. Clozapine had a high maintenance rate, as has been observed in long-term naturalistic studies in adults, and its tolerability was comparable to that of other antipsychotics. No patients presented serious hematologic adverse effects during the 24 months of follow-up. Patients who were prescribed clozapine over the follow-up showed significantly higher symptom severity as measured with the CGI-severity scale ($p = 0.02$) and lower functioning as measured with the CGAS ($p = 0.004$) at first psychotic presentation than other FEP patients. These patients also had longer duration of untreated psychosis (DUP) at baseline (91.5 ± 52.8 days) than other FEP patients (61.9 ± 50.9 days) but this difference was not significant. No significant differences were found in terms of sex of age at onset between the clozapine and the 'other antipsychotic' group.

W2-02-04 Time to initiation of clozapine treatment in children and adolescents with early-onset schizophrenia in Germany

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* Speaker

Studies in adults with treatment-resistant schizophrenia have shown a considerable delay in clozapine use, but to date there are no studies in children and adolescents. A cohort of children and adolescents with early-onset schizophrenia and first-time clozapine prescription was retrospectively studied ($n = 114$, mean age at first hospitalisation because of schizophrenia symptoms: 15.2 years [range 10.7–18.2 years], 36.8 % females). Socio-demographic data, data on antipsychotic use prior to clozapine initiation, time to initiation of clozapine treatment and potential correlates/predictors at baseline of shorter time to initiation were extracted from the clinical files.

The mean number of antipsychotic treatment episodes prior to clozapine initiation in this sample was 2.4 (SD 1.1). Prior to clozapine, 48.2 % of patients had had two antipsychotic treatment episodes, and 34.3 % had ≥ 3 treatment episodes. In 80.3 % of antipsychotic treatment episodes prior to clozapine, patients were prescribed atypical antipsychotics, with risperidone ($n = 56$ treatment episodes), quetiapine ($n = 52$), olanzapine ($n = 52$), aripiprazole ($n = 22$), amisulpride ($n = 18$) and ziprasidone ($n = 12$) being the most frequently prescribed agents. The mean time from schizophrenia onset to clozapine initiation was 1.1 (SD 1.0) years. Higher age ($p < 0.0005$), higher IQ ($P = 0.019$) and male sex ($p = 0.016$) predicted shorter time to clozapine initiation. In summary, this study showed that clozapine treatment was initiated much earlier in young patients with schizophrenia in comparison to the few studies including adult patients. The reasons for the differences in treatment patterns between youths and adults are not entirely clear, but the expected poor prognosis of early-onset schizophrenia may play a relevant part. The significant portion of patients undergoing ≥ 3 antipsychotic trials or polypharmacy prior to clozapine indicates that there is still a need of dissemination of guideline knowledge on clozapine use.

Keywords: Clozapine, Treatment resistant psychosis, Children and adolescents, Schizophrenia.

W2-03 Historia de la Psiquiatría del niño y adolescente en España

M. Mardomingo, O. Herreros, J. Velilla, P. Ruiz-lazaro

University Complutense of Madrid, Spain; Aepnya; University of Zaragoza, Zaragoza, Spain

Objetivo: acercarse a una parte de la historia española de la Psiquiatría de la infancia y adolescencia y de nuestra sociedad científica AEPNYA sesenta años después de su fundación una vez reconocida la especialidad de Psiquiatría del niño y del adolescente en España.

-Augusto Vidal i Parera y su compendio de Psiquiatría Infantil
Dr Óscar Herreros Rodríguez

Director Revista Psiquiatría Infanto-Juvenil Vocal Junta AEPNYA
Este barcelonés nacido en 1872 fue profesor de Psiquiatría infantil, catedrático de la Escuela Normal Superior de Maestros de Barcelona y Presidente de la Academia de Ciencias Pedagógicas. Profesor numerario de la Escuela Normal de Maestros de Huesca desde 1916 fue alcalde de la capital altoaragonesa el bieno 1920-22 y murió de pulmonía con 50 años. Abrió un consultorio clínico pedagógico-pionero en su día. En 1907 publica la primera edición de su Compendio de Psiquiatría Infantil destinado principalmente a los maestros, el primero en España y el primero con ese nombre en Europa y América.

-Agustín Serrate Torrente y la Unión Europea de Paidopsiquiatras.
Profesor José Mariano Velilla Picazo

Presidente de Honor de la Asociación Española de Psiquiatría del Niño y del Adolescente (AEPNYA).

Antiguo jefe de Psiquiatría de la Infancia y Adolescencia. Hospital Clínico Universitario de Zaragoza. Universidad de Zaragoza.

Nació en 1911 en Huesca y realizó su formación psiquiátrica con profesores como Kleist en Alemania y Rey Ardid en Zaragoza. Trabajó en el Manicomio Nuestra Señora del Pilar y en la sala Ramón y Cajal del Hospital Real y Provincial Nuestra Señora de Gracia de Zaragoza.

Gran pionero de la Psiquiatría infantil española, inauguró en 1967, en el contexto de la cátedra fundada por el Profesor Ramón Rey Ardid en Zaragoza, una de las primeras unidades de Psiquiatría infantil de nuestro país, con pacientes de los más diversos lugares del norte de España.

En Viena fue elegido, por sus méritos científicos y humanos, Presidente de la Unión Europea de Paidopsiquiatras.

Su otra especialización fue la Psiquiatría proyectiva, impulsor de las técnicas diagnósticas rorschachianas, organizó reuniones, congresos y publicaciones de ámbito internacional.

Publicó mucho, cuando era difícil hacerlo, en la primera mitad del siglo XX y hasta su muerte en 1985.

Fue cronista de los primeros 25 años de la sociedad y primer director de la Revista de Psiquiatría Infanto-Juvenil fundada en 1983

-Solé Segarra y la fundación de la Sociedad de Neuropsiquiatría Infantil

Profesor Pedro Manuel Ruiz Lázaro (MD, Ph D)

Profesor asociado de la Universidad de Zaragoza. Doctor en Medicina. Especialista en Psiquiatría.

Jefe de Sección FEA Psiquiatría Infanto-Juvenil Hospital Clínico Universitario de Zaragoza.

Investigador Asociado del Instituto Aragonés de Ciencias de Salud. I + cs

Coordinador del Grupo ZARIMA y ZARIMA PREVENCIÓN de la Unidad Mixta de Investigación Hospital Clínico Universitario-Universidad de Zaragoza.

El siglo veinte fue una época decisiva para el desarrollo de la Psiquiatría Infanto-Juvenil en España. No podemos ignorar sus periodos tempranos, la historia del nacimiento y constitución de la Asociación Española de Psiquiatría del Niño y Adolescente (AEPNYA). La Asociación Española de Psiquiatría del Niño y Adolescente nace en los cincuenta con Solé Segarra, su primer secretario. Esta es su historia. José Solé Segarra, tuvo como maestro en 1935 a Emilio Mira. Y se doctoró, gracias a la prestigiosa beca de la Alexander von Humboldt-Stiftung, en Alemania, donde trabajó en las clínicas universitarias de Heidelberg y Marburg/Lahn y tuvo como maestro en 1943 a Ernst Kretschmer. Recién llegado, en noviembre de 1945, se hace cargo de la neuropsiquiatría dentro del departamento de Pediatría de la Universidad de Barcelona, cuyo titular era el Profesor Ramos. Fue decisivo promotor y socio fundador de la Sociedad de Neuro-Psiquiatría Infantil en Barcelona. En otoño de 1949 convocó a los médicos barceloneses más directamente relacionados con la neuropsiquiatría infantil. Se reunían en el "Café Oro del Rin", ya desaparecido. Los profesionales más constantes en reunirse fueron José Córdoba Rodríguez, Luis Folch Camarasa, Jerónimo de

Moragas, Santiago Montserrat Esteve, Julia Corominas, Ramón Bassols Parés (hijo del pediatra Claudio Bassols) y el propio Solé Sagarra. Tras muchas vicisitudes fundaron nuestra sociedad científica en 1952.

W2-04 Child and adolescent mental health policies and policy programs in Europe

F. Cuhadaroglu, D. Anagnostopoulos, S. Crommel, A. Severny, H. Ebeling

Escap; Hellenic Association for Cap; Belgium Association for Cap; Russian Association for Cap; Finland Association for Cap

CHILD AND ADOLESCENT MENTAL HEALTH POLICIES AND POLICY PROGRAMS IN EUROPE

Prof. Dr. Fusun Çuhadaroglu (on behalf of the ESCAP Policy Division)

Policy Section of ESCAP organizes this symposium to provide an opportunity to discuss policy issues about child and adolescent mental health in various countries around Europe. Four speakers from different parts of Europe (east, west, north and south) will present the condition in their countries regarding the mental health policy attitudes of the politicians, resources for mental health, number and speciality of mental health professionals, financial sources, services, implemented programs, advocacy, children's rights and current difficulties to deal with. After the presentations, the topic will be opened for discussion of the attendees to share some of the other countries' policy programs and to discuss the common basis and possible solutions for the presenting problems and difficulties and to explore ways to enhance the child and adolescent mental health policies all over Europe.

Keywords: CAMH, Policy.

W2-04-01 A review of child mental health policies in Greece since 90's

Dimitris C. Anagnostopoulos MD, PhD

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Greek Psychiatry and Child Psychiatry are presently in a transitional period. Following a large-scale reform effort that started in the mid-80s, de-institutionalization and establishment of numerous community services has been achieved to a great extent. However, sectorization, development of primary care policies, inter-sectoral communication and long-range planning have not been achieved and deficiencies in the provision of care for children, adolescents, old people, persons with autism, with intellectual disabilities and with eating disorders as well as deficiencies in forensic psychiatric services have been identified. Thus, the Greek psychiatric reform is an unfinished reform.

The development of psychiatric services for children has followed a different course compared to that for adults as the creation of only 30 % of the scheduled child guidance clinics has been implemented. Also, the distribution of child psychiatry services has been uneven in favor of the area of Attica (where the city of Athens

belongs). In some nomes (greater areas) there is not a single child psychiatry service.

The financial crisis that has recently hit the country has had a serious impact on the population and a very negative impact on child psychiatric provision of services. The demand for services from the public sector has increased considerably for two possible reasons. First, in periods of financial crises, increase in psychopathology of children and adolescents is expected because of the effect of the crisis on the family as a whole and second because the finances of the family do not allow continuation of treatment in the private sector.

Continuation of the psychiatric reform to its desired extent has become problematic. This situation calls for re-orientation of the national mental health strategy towards more realistic goals, i.e. securing a satisfactory level of function of the existing services, persisting in the implementation of the targets of the psychiatric reform, creating the necessary infrastructure but avoiding the creation of expensive facilities of secondary importance. Consideration of priorities is very important during this period of economic turmoil.

Information on the existing network of psychiatric services, evaluation of the services, training in Psychiatry and Child Psychiatry, research and scientific representation is provided and research on the impact of the World economic crisis on the Greek population is reported.

W2-04-02 The organisation of mental health services for children and adolescents (CAMHS) in Belgium and development of a policy scenario (presentation of a KCE-study)

Sofie Crommel

Belgium Association for CAP

In Belgium the authority for Mental Health Care (MHC) is divided across the federal government and the communities and regions (Flanders (northern part) and Wallonia (southern part)). In recent years several joint initiatives have been taken, such as projects to stimulate care networks and care circuits.

The role of MHC in primary care is neither formally recognised nor supported by policy, although these services, e.g. General Practitioners, often offer MHC.

As regards specialised child and adolescent MHC, there is a broad range of care with a variety of funding mechanisms. It is, however, not always clear to what extent certain forms of service overlap or if there are any gaps in the system. Projects were launched in the last decade to ensure a more specific range of care for a number of target groups, but structural funding is lacking at present.

In Flanders work has been done for some years on the start-up of Integrated Youth Care. This includes a joint policy for all Flemish sectors and services involved in assisting children and adolescents (welfare, disability care, education, preventive care, and the outpatient MHC Centres). The model of integrating several sectors in the organisation of care is less prominent in the Walloon region.

The Belgian Health Care Knowledge Centre (KCE) is an organization of public interest, under the supervision of the Minister of Public Health and Social Affairs. KCE is in charge of conducting studies that support the political decision making on health care and health insurance.

The KCE was commissioned to perform a study that would offer input for a reform of the CAMHS-system.

The objective was to set up a participatory process to lay down the contours of a future Belgian CAMHS-system.

A "diagnostic analysis" of the CAMHS-system in Belgium and the recommendations for a transition to a more effective CAMH-system will be presented.

W2-04-03 CAMH policy in Russia: current trends

A. A. Severny, Y. S. Shevchenko, E. V. Koren, N. V. Zvereva

Child and adolescent psychiatric care is a part of general psychiatric service. Nowadays medical care of children and adolescents are united to one service, but subdivision of specialties to “children’s” and “adolescent’s” still remains. Apparently, in Russia, “child and adolescent psychiatry” does not have a normative definition in official documents. Disabled children with severe mental retardation receive government welfare. The Russian Federal Law “On Psychiatric Care and Patient Rights as it is Rendered” of 1992 is very important for the modern state of psychiatric service. There were endorsed psychiatric examination norms for minors, rules for their hospitalization or admission to special educational institutions, as well as rules of discharge from psychiatric hospitals and other special institutions. The law founded the basis for legal and social regulations of psychiatric patients and gave public organizations the possibility to control the rights of mentally ill in psychiatric hospitals. There are no officially determined and adopted principles of psychiatric care for children and adolescents. The distribution of the psychiatric care is based on a principle of district service. There are no structures for specialized care for different forms of psychiatric disorders. Care for children with mental abnormalities is divided into three departments: Public Health, Education, and Social Protection. Two main types of psychiatric care—outpatient (in psychiatric dispensaries and outpatient clinics) and inpatient (in the children’s psychiatric departments of district psychiatric hospitals)—belong to the Public Health Department. Cooperation between psychiatrists and non-medical institutions and professionals is hampered by their dependence to different departments. All other forms of psychiatric service organization are not practically in use. There is only one non-governmental professional organization—Association of Child Psychiatrists and Psychologists, which was found in 1992. The number of ACP members currently is about 150 from 16 regions of Russia, from Lithuania, Estonia, and Kirgizien. The ACP unites child and adolescent psychiatrists, psychologists, and children’s specialists of allied disciplines. ACP together with other organizations are working for realization of Child Psychiatric Service (CPS) plan. Those changes are necessary and inevitable because they follow the needs of the children’s population and basic trends of child psychiatry all over the world.

W2-04-04 Child and adolescent mental health care in Finland—changing trends

Hanna Ebeling

Faculty of Medicine, Institute of Clinical Medicine, Department of Child Psychiatry, University and University of Oulu, Finland

Finland is a sparsely populated country with 5.5 million inhabitants in an area of about 340,000 km². Most inhabitants live in Southern Finland, the fact giving challenges to the health care systems especially in the Northern parts of the country. About 43.5 % of the families with children have only one child, 51.5 % have two or three children and only 5 % have four or more children. There are relatively more large families in the Northern parts of the country.

The mental health care services for children and adolescents have included primary health care, e.g. child welfare clinics, child guidance clinics, health centers and school health care services. Services have varied in different municipalities and parts of the country. There are 21 Central Hospital Districts in Finland, most of them giving child and adolescent inpatient as well as outpatient treatment. However, a change in the social and health care services is now on process. The main targets of the change are to guarantee equal services in different parts of the country, back up primary health care services and outpatient treatment and to better connect social and health services. Challenges are high especially in the most sparsely populated areas of the country, where the closest services have been reached only in distance of hundreds of kilometers. The use of information technology is a great possibility and necessity. The child and adolescent mental health care services in Finland and needs for them shall be introduced in the presentation.

W2-05 Research for a clinical approach of uniqueness of each child

W. Michel, G. Marie-camille, K. Miri, S. Mario, P. Maja

Sfpeada; Ppumba (psychiatric Perinatal Emergency Unit In Maternity Wards); Waimh; University Of Versailles Saint Quentin En Yvelines.; Unité De Psychologie Clinique De L’enfant

Following the creation of a «Clinical Division» within ESCAP, our Society proposes a symposium dedicated to the theme «Research for a clinical approach of uniqueness of each child».

This symposium would deal with the clinical aspects in the researcher’s work. It suggests emphasizing the ways of thinking and making of the clinician-researcher in his relation for his theme of research and for his patients.

Research for a clinical approach of uniqueness of each child.

SFPEADA

Présidence: Michel Wawrzyniak

Motherhood of women with borderline personality disorder and Interaction with their children : longitudinal perspectives in motherhood, mother-baby’s interaction, attachment and emotional regulation of the children	Marie-Camille Genet, Valérie Garez Emmanuel Devouche, Marina Valente, Annick Le Nestour, Gisèle Apter (France)
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Psychopathology in Infancy and its course along childhood: A follow up study of school age children treated in their infancy years	Miri Keren, Daphna Dollberg, Sam Tyano, Ruth Feldman (Israël)
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Profiles of defense mechanisms in adolescents with borderline personality disorders and their relationships with childhood traumatic experiences	Mario Speranza, Marion Robin, Maurice Corcos, Alexandra Pham Scottez (France)
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Maja Perret-Catipovic (Suisse)

Discussion conclusions

W2-05-01**Motherhood of women with borderline personality disorder and Interaction with their children: longitudinal perspectives in motherhood, mother-baby's interaction, attachment and emotional regulation of the children**

Genet Marie-Camille, speaker

PPUMMA (Psychiatric Perinatal Emergency Unit in maternity wards) EPS ERASME HOSPITAL ANTONY, PARIS DESCARTES UNIVERSITY

Garez Valérie speaker

PPUMMA (Psychiatric Perinatal Emergency Unit in maternity wards) EPS ERASME HOSPITAL ANTONY, FRANCE,

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Our results are based on a longitudinal study, a prospective exploration of a cohort of mother-infant dyads of mothers with borderline personality disorder, compared to a control group. The aim of this study is to elucidate the early intrapsychic functioning of these mothers and infants through the study of the early interactions between these borderline mothers and their three-month-old infants and to discuss the impact on therapeutic management from pregnancy to toddlerhood. Motherhood represents a powerful developmental milestone, during which maternal imagos are reorganized. Mothers suffering from borderline personality disorder need to work through identity issues due to their new maternal status while still being hampered by a failing narcissism. Microanalysis of mother-infant interaction of 92 dyads using the Still Face Paradigm showed that mothers with Borderline personality Disorder (BPD) and their three-month old infants were involved in interactive patterns that paradoxically combined paucity of variation and excessiveness of initiation and excitement. Infant's regulatory efforts are visible through dysregulated behaviors. These results suggest, in accordance with the literature, that children of mothers with BPD may be at risk of emotional dysregulation and Disorganized Attachment which are in turn risk factors for BPD. Among these dyads, 14 in the BPD group and 13 in the control group were followed up until school age. We will present longitudinal results of this subgroup including interactive micro-analysis, attachment status using the Strange Situation Procedure and toddler's attachment and quality of emotional regulation using the Attachment Story Completion Task. Impact on therapeutic managements will be discussed.

W2-05-02**Psychopathology in Infancy and its course along childhood: A follow up study of school age children treated in their infancy years**

Miri Keren, Daphna Dollberg, Sam Tyano, Ruth Feldman

Objective: The issue of continuities and discontinuities of psychopathology during the first 3 years of life is still in debate, and there are even fewer studies about the follow up of treated infants and their

parents. We followed 30 children 4–5 years after they had been treated with their parents at our Infant Mental Health clinic. Method: 30 post-diagnosed (DC 0–3) and treated in infancy 6–11 years old children and 24 matched for age and demographics children who had never been treated, were compared regarding their socio-emotional functioning (DAWBA interview, Vineland questionnaire), coded interaction with mother (CIB) and maternal psychopathology (SCL-90R). Neurodevelopmental disorders including autism, were excluded. Results: Parent-infant relationship disorders were the only DC 0-3 diagnoses significantly correlated with DSM diagnoses at school age. The frequency of disorders between the two groups was not significantly different, but those in the study group were significantly more impaired, and their mothers had significantly higher levels of psychopathology. Conclusion: These results, if replicated in a larger sample, suggest that early relational disorders may be more predictive than any other diagnosis in infancy, of later psychopathology. Maternal psychopathology increases the severity of the child's level of dysfunctioning at school age, which may suggest the need to go on treating mothers after the termination of the infant's therapy.

W2-05-03**Profiles of defence mechanisms in adolescents with borderline personality disorders and their relationships with childhood traumatic experiences**

Mario Speranza¹, Alexandra Pham-Scottet^{2,3}, Ludovic Gicquel⁴, Fernando Perez-Diaz⁵, Julien-Daniel Guelfi², Maurice Corcos^{3,6}, EURNET-BPD (European Research Network on Borderline Personality Disorder)

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Background: Defence mechanism is a key concept in the psychoanalytic psychopathology of borderline personality disorder (BPD). They are set in the individual during development according to his relational experiences. Several studies have shown that BPD adults present a specific profile of defensive functioning compared to subjects with other personality disorders. Although BPD has its onset in adolescence, very few studies have investigated the defence style of BPD adolescents and their relationships with childhood experiences. This was set as the aim of this study.

Methods: Subjects were issued from the European Research Network on Borderline Personality (EURNET BPD), a European research project investigating the phenomenology of BPD in adolescence. A sample of 130 subjects were included: 60 consultant or inpatient adolescents or young adults presenting a diagnosis of BPD according to the Structured Interview for DSM-IV Personality Disorders and 70 matched control subjects without any personality disorder (mean age of 16.3, SD1.4; 13 % of men and 87 % of women). All subjects fulfilled the The Defence Style Questionnaire (Bond et al., 1984) and the Childhood trauma questionnaire (CTQ) (Bernstein et al., 1994).

Results: In agreement with previous studies conducted among adults BPD (see Zaanarini et al., 2009), adolescents with BPD show a specific utilization of the more immature defence mechanisms. We also observed a significant relation between these immature defence mechanisms and a more complicated trauma histoire.

Conclusion: BPD adolescents show a specific profile of defensive functioning compared to normal adolescents. The relationships between these immature mechanisms and the presence of specific traumatic experiences will be discussed. In the perspective of psychotherapeutic interventions.

W2-05-04

Science without conscience is but the run of the soul: the necessary dialogue between research and the distinctiveness of each individual in a clinical setting

Perret-Catipovic Maja

Psychologist-psychotherapist FSP, Psychoanalyst SSPSa, Office médico-pédagogique, Geneva, Switzerland

At the emergency ward, patient regains consciousness and the on duty physician explains that she fainted in the street because of hypokalemia. “Go home and eat bananas,” he said to my patient suffering of anorexia nervosa.

Proper analysis of a health problem and prescription of treatment adapted to the problem identified can be both correct from the point of view of scientific research and completely ineffective, even absurd from a clinical point of view.

But why patient do not always want the treatment that could relieve or even “cure” them? This should be the priority of any research in mental health

Knowledge in child psychiatry suffer from large gap between research on one hand and the practice of psychotherapy, the perfect example of clinical singularity

Unable to make his patient accept the treatment recommended by the “best practice guides” the clinician may feel accused of not using the state of the art treatment. The clinician may even be tempted to go “underground”, ignoring the research data and basing his expertise and convictions on the very small number of situations that a clinician can treat in his life. Clinical practice disconnected from research can produce health care systems based on beliefs rather than science, but conversely, and research disconnected from the clinic of the singularity can produce rejection of its results rather than their integration into the clinical practice.

These proposals will be discussed with reference in particular to adolescent psychopathology.

1 Rabelais (Pantagruel, 1532)

W2-06

Treatment of adolescents with severe identity disturbance

S. Schlueter-mueller, A. V. Orelli, M. Kassin, A. Dixius

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Personality disorders can be seen as patterns of maladaptive personality traits that have their onset during childhood or adolescence and that have an impact on the individual throughout the life span. Identity disturbance is seen as the central construct for detecting severe personality pathology—and, most notably, borderline personality disorder—in adults and adolescents.

One of the most central tasks of normal adolescent development is the consolidation of identity. Crises in the development of identity usually resolve into a normal and consolidated identity with flexible

and adaptive functioning. By contrast, identity diffusion is viewed as a lack of integration of the concept of the self and significant others; it is also seen as the basis for subsequent personality pathology, including that of borderline personality disorder, which leads to a broad spectrum of maladaptive and dysfunctional behaviors.

This symposium has its focus on the treatment of severe identity disturbance in adolescents with different treatment models and in different settings.

The first two talks introduce AIT (Adolescent Identity Treatment), a treatment model which focuses on identity pathology as the core characteristic of personality disorders. The next talk will describe treatment approaches for identity problems in Mexican adolescents who live in a changing society with a high rate of school drop-outs and an extreme increase of delinquency (involved in organized crime or dealing with drugs). The last talk focuses on the impact of DBT-Aon identity development in an inpatient population with personality disorders.

Chair: Schlueter-Mueller, S.

Co-chair: Schmeck, K.

Talks:

General principles of the Adolescent Identity Treatment (AIT) for adolescents with personality disorders.

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Evaluation of the AIT-treatment approach.

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Mexican adolescents' situation and their identity development

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A question of identity? Impact of DBT-therapy on adolescents' identity development

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Symposium “Treatment of adolescents with severe identity disturbance”

Chair: Schlüter-Müller, S.

1. Schlueter-Mueller S, Burger V. General principles of the Adolescent Identity Treatment (AIT) for adolescents with personality disorders

2. Von Orelli A, Schlueter-Mueller S. Evaluation of the AIT-treatment approach

3. Kassin M. Mexican adolescents' situation and their identity development

4. Dixius A, Möhler E. A question of identity? Impact of DBT-therapy on adolescents' identity development

W2-06-01

General principles of the Adolescent Identity Treatment (AIT) for adolescents with personality disorders

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Objective: For a long period of time, the treatment of adolescents' personality pathology was dependent on psychotherapeutic concepts that had been developed for the treatment of personality disorders in adults. After the major breakthrough to adapt DBT for the treatment of adolescents with Borderline Personality Disorder, the adaptation of other treatment approaches like Cognitive Analytic Therapy (CAT) or Mentalization-Based Therapy (MBT), or Emotion Regulation Training (ERT) for use in adolescents followed. Adolescent Identity Treatment (AIT) is an integrative psychotherapeutic model that focuses on identity pathology as the core characteristic of personality disorders. This approach uses psychodynamic techniques based on object-relation theories as well as modified elements of Transference-Focused Psychotherapy for the treatment of adolescents' personality pathology. Moreover, psycho-education, behavior-oriented home plans, and family work support the therapeutic process of the adolescent.

Method: The first evaluation comparing AIT with Treatment as Usual (TAU) was conducted with 20 female and 3 male patients, ages 14 to 19-years-old who were diagnosed with Borderline Personality Disorder according to DSM-IV-TR criteria. Based on chart data the structured clinical interview SCID II, the Borderline Personality Disorder Dimensional Interview (BPDDI), the Global Assessment of Functioning Scale (GAF), the Clinical Global Impression Scale (CGI) and a School Functioning Rating were rated at baseline, at 6 months and at 12 months after the start of the treatment.

Results: The preliminary data of this first study show a trend towards better identity integration ($p = 0.09$), less feelings of emptiness ($p = 0.08$) and less self-injurious behaviour ($p = 0.11$) as well as a significant increase in adaptive functioning ($p = 0.003$) in patients treated with AIT in comparison with TAU.

Conclusion: The results of this initial pilot study are promising. A scientific evaluation with more sophisticated methodology is needed to establish Adolescent Identity Treatment as an approach to treat severe personality pathology in adolescents.

Keywords: Treatment, Personality disorders, Adolescence.

W2-06-01

Evaluation of the AIT-treatment approach

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Objective: The new treatment approach Adolescent Identity Treatment (AIT) is an integrative psychotherapeutic model that focuses on identity pathology as the core characteristic of personality disorders. This approach integrates psychodynamic techniques based on object-

relation theory and modified elements of Transference-Focused Psychotherapy with psycho-education, behavior-oriented home plans, and family work for the treatment of personality disorders in adolescents. Results of an initial pilot study are promising. We now start a comparison of AIT with DBT-A.

Method: The focus of psychotherapy research in adult personality disordered patients is shifting towards a more thorough look on specific and unspecific factors that may influence the outcome of a treatment approach. To compare these factors in Adolescent Identity Treatment versus DBT-A and to detect predictors of outcome we use psychotherapeutic process research methods based on video-analytic techniques. Integrated in the process research approach is the assessment of cardiovascular and electrodermal functioning as well as parameters of the HPA-axis functioning.

Results: This is the first study to evaluate psychotherapeutic processes of two very different approaches for the treatment of adolescents with severe personality pathology. The integration of neurobiological methods enhances the chance to detect predictors of change and successful outcome. We will present our first pilot data.

Conclusion: Due to the long period when personality disorders in children and adolescents were not diagnosed the treatment of adolescents' personality pathology is still in its infancy. According to the well-respected psychotherapy researcher Alan Kazdin (2007) understanding the mechanisms of treatment can be seen as the path toward improved treatment.

Keywords: Process research, Personality disorders, Adolescence.

W2-06-03

Mexican adolescents' situation and their identity development

Moises Kassir

Objective: Diagnostic and Statistical Manual DSM-5 criteria for Personality disorders (PD) may be applied with children and adolescent. The alternatives model in the DSM-5 integrates the construct "Identity" as a central diagnostic criterion. As the main task in adolescent development is the consolidation of Identity, we studied how Identity is developed within Mexican adolescent population, looking for differences between Identity crisis and Identity Diffusion.

Methods: Participants were 407 students from a state school ($N = 110$), private school medium socioeconomic level ($N = 147$), private school high socioeconomic level ($N = 150$) aged between 12 and 19 years (mean 14.15 years). We used the questionnaires AIDA (Assessment of Identity Development in Adolescence; Goth et al., 2013); MACI (Millon Adolescent Clinical Inventory (Millon, 1993); YOQ 2.0 (Youth Outcome Questionnaire; Burlingame et al., 2005). The Abbreviated Version of the Diagnostic Interview for Borderline (Ab-DIB) (Guile et al., 2009) was used to obtain more specific information of personality disorders in the sample. Statistical analysis was done with T-test with effect size and Pearson correlation to correlate identity diffusion with personality disorder.

Results: The AIDA scores differed with about medium effect size between boys and girls in the Mexican school sample. The Mexican girls showed systematically lower scores than the boys in the AIDA, implying healthier development, i.e. better identity integration. Mexican subjects showed systematic differences between the two age groups (12–14 and 15–19 years) with small to medium effect sizes. A high correlation between Identity diffusion and Personality pathology could be found.

Conclusion: It can be assumed that in Mexico distinct developmental stages related to age and gender can be found. In line with the general theory of adolescent development and identity, the younger adolescents displayed higher levels of "identity diffusion" without reaching pathological levels. This is viewed as a sign of an expected identity crisis at this age. There are some adolescents with an identity diffusion who need guidance or psychotherapy treatment to unblock their development.

Keywords: Identity, Adolescence, Personality.

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W2-06-04

A question of identity? Impact of DBT-therapy on adolescents' identity development

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Introduction: Dialectical behaviour Therapy (DBT) is an internationally evaluated treatment for adolescents with emotion regulation disorders. Identity development is a fundamental developmental process of adolescence. Adolescents with disorders of emotion regulation show disturbances in identity development.

Methods: We assessed a sample of 42 adolescents (34 girls, 8 boys; age range 14–18 years). 25 adolescents were in inpatient treatment, 8 patients with Borderline Personality Disorder, 17 patients with other psychiatric diagnoses. Assessment instruments were Assessment of Identity Development in Adolescence (AIDA), SCL-90-R, a questionnaire to assess depression in children and adolescents (DIKJ), STAI and STAXI. Adolescents were included in a certified 3-month standardized DBT-treatment program. Identity development was assessed again at the end of the treatment program.

Results: The AIDA Total Score correlates significantly ($r \geq 0.51$) with SCL-90-R total score, depressivity (DIKJ) and both trait anxiety (STAI) and trait anger (STAXI). BPD adolescents show significantly higher scores in identity diffusion in comparison to patients with other psychiatric disorders. At the end of the treatment, DBT-A led to a significant reduction of identity incoherence, while identity discontinuity was less improved.

Discussion: Dialectical Behavior Therapy seems effective in reducing symptoms of identity development disturbance. Treatment response differs according to psychopathology. These results are clinically relevant for the development of specific treatment programs targeting identity disorders and self concept.

Keywords: DBT-A, Identity, Borderline personality disorder.

W3

Mental health care for children and adolescents in Europe : challenges and future perspectives

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Mental health care for children and adolescents in Europe varies from country to country and from one part of the countries to another in terms of quantity and quality. This fact makes it difficult to make any specific recommendation that would be valid for all of Europe or even for all parts of any particular European country and it is therefore

necessary to build the future of child and adolescent psychiatry (and of mental health promotion) as a mosaic with a variety of services and arrangements differing from each other but made harmonious by the acceptance of general ethical principles and the use of rational approaches to problems that arise.

The presentation will first discuss socioeconomic and other factors shaping the context in which child mental health care has to happen and then review modalities of care for children and adolescents as well as possible vehicles of the promotion of mental health and development. It will also refer to professional and organizational dilemmas facing child and adolescent psychiatry and problems such as that of continuity of care across age that accompany the growth of mental health care services for children and adolescents

SUNDAY POSTERS

PS-001

A health promotion program for children and adolescents with ADHD

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Objectives: ADHD is a chronic mental health problem with long-term morbidity in adulthood and high risk for mortality. In adults, it often presents as a lifelong condition associated with clinical and psychosocial impairment. Children and adolescents with ADHD often exhibit negative health behaviors e.g. sedentary lifestyle, unhealthy dietary patterns, bad sleep quality, high-risk behaviors, which are mainly associated with poor health outcomes. The aim of the present study was to evaluate a clinical-based health promotion program in children and adolescents with ADHD.

Methods: 70 children and adolescents with ADHD aged 10–13 were incorporated in the study, after being randomized in two groups, the intervention group (IG, N = 35) and the control group (CG, N = 35). An intervention program comprising counseling on healthy dietary patterns and physical activity and relaxation techniques was implemented for 8 weeks. Outcome measures included Healthy Lifestyle (Lifestyle Questionnaire), Health-related Quality of Life (Pediatric Quality of Life Inventory 4.0-PedsQL 4.0), Psychiatric Symptoms (Strengths and Difficulties Questionnaire-SDQ) and Perceived Stress ("Stress in Children" Questionnaire-SiC).

Results: There have been no significant differences between the IG and the CG in perceived stress, health-related quality of life and psychiatric symptoms. Nevertheless, the IG participants mentioned a better sleep quality ($p = 0.001$), as well as fewer episodes of headache ($p = 0.001$) and stomachache ($p < 0.001$) during the last month. Moreover, they had adopted better eating habits, such as more fish ($p = 0.009$), fruits ($p = 0.002$), legumes ($p = 0.022$) and less sweets eating ($p = 0.004$), whereas they devoted more time to exercise ($p < 0.001$) and less time to watching TV ($p < 0.001$).

Conclusion: This is the first randomized controlled clinical trial oriented to health promotion in ADHD. The specific intervention program appears to have beneficial effects on the reduction of somatic complaints and on adapting health-promoting behaviors. This finding is really encouraging considering that lifestyle change in ADHD is of high importance taking into account the long-term morbidity and the high-risk behaviors exhibited.

PS-002 Adaptive profiles in children with attention deficit hyperactivity disorder and autism spectrum disorders

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Many neurodevelopmental disorders display social difficulties, e.g. children with Attention deficit-hyperactivity disorder (ADHD) present usually inappropriate social behaviors. Often, social competences in ADHD are thought to be related to self-regulation deficits, low social skills adaptive level and attentional issues that can impact the overall ability to process social information. Children with ADHD may have low social impact and their social isolation and/or intrusive approaches to other children can be mistaken for unawareness of social world rules, as seen in Autism spectrum disorder (ASD). In ASD there is a specific social-communication core deficit, associated with restricted repetitive behaviors. Research during past years highlighted possible clinical overlapping between ADHD and ASD. In line with this, the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5) allows the comorbidity diagnoses of ADHD and ASD. Considering the main effort to combine diagnostic approach to qualitative clinical dimension a group of children affected by neurodevelopmental disorders were studied.

30 patients (mean age 7,2) with ADHD as first diagnosis, was evaluated in our departments. They present complex clinical features, with important limitation in social competences. An evaluation protocol was set up including Autism Diagnostic Observation Schedule-second edition (ADOS-2), intelligence level evaluation and Vineland adaptive behavior scale- second edition (VABS-II). For all this patients with primary diagnosis of ADHD a clinical comorbidity with ASD was confirmed (ADHD+). Further ASD profile, intelligence level and adaptive functioning were compared with a group of 30 patients with ASD (mean age 7,7). ASD symptoms were found more relevant in ASD without ADHD group, instead ADHD plus group displayed a worse adaptive profile.

A relative worsening of daily living skills in subjects with double diagnoses was the most relevant preliminary finding and it may represents the hypothesis to develop in future research.

PS-003 Adolescentes con trastornos de la conducta alimentaria y autolesiones

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Introducción: Los Trastornos de la Conducta Alimentaria (TCA) son patologías en aumento en las que se han descrito la coexistencia de conductas autolesivas como mecanismo de afrontamiento de las emociones intensas. El objetivo de este trabajo es estudiar la relación entre los diferentes subtipos de TCA, así como de sus manifestaciones sintomáticas con la presencia de conductas autolesivas, sin finalidad suicida.

Método:

Participantes

60 adolescentes ingresados en el Instituto de Trastornos Alimentarios (ITA) diagnosticados de Trastorno de la Conducta Alimentaria.

La mitad de ellos presentaban historia de autolesiones, sin que éstas estuvieran presentes en la otra mitad de pacientes.

Instrumentos:

- Para las medidas psicométricas se utilizaron los siguientes instrumentos:
- Entrevista Diagnóstica semiestructurada (SCID-I)

Eating Disorders Investigatory 3(EDI-3)

Procedimiento estadístico

Para la contingencia entes diagnóstico TCA y autolesiones se empleó el valor X2 y V de Crammer

Para establecer relaciones entre la presencia de autolesiones y las puntuaciones del EDI-3 se utilizó el Análisis de la Varianza y el valor η^2 para establecer el tamaño del efecto.

RESULTADOS: A excepción de las escalas de Inseguridad interpersonal y Perfeccionismo, todas las escalas del EDI-3 son significativamente más altas en el grupo de pacientes con historia de autolesiones. Las escalas desajuste emocional y déficits interoceptivos obtienen los mayores tamaños del efecto ($\eta^2 = 0.14$ y $\eta^2 = 0.21$ respectivamente).

CONCLUSIONES: A pesar de que el estudio no permite confirmar la asociación entre diagnóstico en TCA y presencia de autolesiones, la tendencia a la significación estadística replica los hallazgos de la literatura reciente.

En el caso de las variables clínicas medidas con el EDI-3, la relación existente entre autolesiones y síntomas sitúan a la conducta autolítica no suicida en un vector ascendente de gravedad del cuadro presentado. Así lo demuestra el hecho de que las escalas Bulimia, Baja Autoestima, Alienación personal, Ascetismo y Miedo a la madurez se sitúen en el Rango Clínico Elevado para el grupo con presencia de autolesiones a diferencia del grupo sin autolesiones, que puntúa en el Rango Clínico Típico.

Los importantes tamaños de efecto encontrados en las escalas de desajuste emocional y déficits interoceptivos refuerzan la función de autoregulación disfuncional del bienestar de las autolesiones.

Este último dato refuerza la necesidad de incluir programas para fomentar la autoregulación emocional mediante estrategias de afrontamiento eficaces en los programas de tratamiento estos trastornos

PS-004 Adolescents-parents agreement on mood symptoms in Korean

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Objectives: Korean parents are known to be less sensitive to internalizing problems such as depression or anxiety of their children, while they consider externalizing problems such as aggressiveness and delinquency to be more salient. The purpose of this study was to evaluate the roles of the parent ratings and adolescents' self-reports during the assessment of bipolar and depressive disorders in Korean youth.

Methods: Subjects with mood disorder and their parents were recruited from September 2011 to June 2013 through the Department of Psychiatry at Asan Medical Center, Seoul, Korea. Community participants were recruited through two middle schools and one high school in Seoul. The parents of subjects completed Parent-version Mood Disorder Questionnaire (P-MDQ), 10-item P-GBI and Attention-Deficit/Hyperactivity Disorder Rating Scale (ARS). The

adolescents did the 76-item A-GBI, Beck Depression Inventory (BDI), and Adolescents version of the Mood Disorder Questionnaire (A-MDQ).

Results: P-GBI ($t = 3.07$, $p = 0.003$), A-GBI depressive ($t = 4.99$, $p < 0.001$) and manic subscales ($t = 3.17$, $p = 0.002$), and BDI score ($t = 4.76$, $p < 0.001$) of clinic-referred group were all different from those of community group. However, A-GBI depressive subscale score ($t = 3.02$, $p = 0.003$), BDI score ($t = 2.12$, $p = 0.037$) and manic subscale score ($t = 2.71$, $p = 0.008$), but not P-GBI score, were different in bipolar disorder from those in depressive disorder. Moreover, while no item of P-GBI differentiated between bipolar and depressive disorders, eight items of A-GBI can discriminate them.

Conclusion: The results of this study suggest the importance of considering adolescents' self report during the assessment of bipolar and depressive disorder. These results are different from the findings from Western countries, and imply that cultural factors should be considered in assessing Youth's mood symptoms.

PS-005

Age-related differences in neuropsychological performance of adhd subtypes

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Introduction: Executive functions experience an improvement over normal development, parallel to brain maturation of prefrontal cortex (PFC). A delay in brain development has been consistently demonstrated in ADHD. Differences between subtypes have been documented in neuroimaging and neurocognition studies. The aim of this study was to explore differential cognitive performance before and after puberty between inattentive (IN) and combined (CO) subtypes in respect to typical development.

Methods: Seventy-five children and adolescents took part in the study: 23 IN, 31 CO and 21 age-matched healthy controls (HC). All participants were males, 8–16 aged, right-handed, medication-naïve, learning disabilities free and no one accomplished criteria for other DSM-IV disorders. Data of parents Conners' Rating Scale (CRS) inattention and hyperactivity scores, CBCL Sluggish Cognitive Tempo (SCT), WISC-IV intelligence scale, WMS-III spatial working memory (sWM), Tower of London and Conners' CPT-II were analyzed. Sample was divided in two subsamples, prepubertal (<12 ; $n = 38$) and postpubertal (≥ 12 ; $n = 37$), whose were standardized by the age-matched HC parameters. Student-Fisher T was calculated to compare the means of distances toward HC functioning between subtypes. Exploratory linear regression analyses were applied to analyze the influence of clinical variables in each age level.

Results: Significant differences were shown between age levels within IN subtype in sWM ($t = 2.18$, $p = 0.041$) and CPT commissions ($t = -3.12$, $p = 0.005$), and within CO subtype in CPT commissions ($t = -3.38$, $p = 0.002$) and CPT reaction time ($t = 2.7$, $p = 0.012$). Prepubertal IN show better sWM than postpubertal, and both IN and CO prepubertals, higher motor control than postpubertals. SCT and CRS-IN scores explained 30 % of variance on prepubertal sWM but General Cognitive Index predicted 31% of postpubertal's. CRS-IN explained 34 % on prepubertal CPT reaction times.

Conclusion: Puberty increased impulsivity in both subtypes but sWM deficits only in IN. These results support non-parallel development pathways for dorsolateral PFC (cognitive processes) and frontal-striatum connectivity (reward processing) between ADHD subtypes and typically developing individuals.

Limitations: Females, comorbidity, left-handedness and learning disabilities were not been considered so further studies might extend these findings. Cross-sectional designs are not the more appropriate in development research, thus longitudinal studies are needed.

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PS-006

Aggression is not uniform in boys with ADHD, ADHD + ODD and ADHD + CD

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Background and aim: Attention Deficit Hyperactivity Disorder is one of the most common psychiatric problems and public health concern for the children and adolescents world wide. It is commonly presented with aggression, which may have different etiology and consequences in different subtypes of ADHD. The aim of this study is to evaluate the differences in aggression patterns in subtypes of ADHD.

Method: A total of 326 boys with ADHD and aggressive behaviors were included, and evaluated with Schedule for Affective Disorders and Schizophrenia for School Aged Children: Present and Life time version, Wechsler Intelligence Scale for Children-Revised, Children's Aggression Scale-Parent and Teacher Versions, Teacher Report Form, and Turgay DSM-IV Disruptive Behavior Disorders Rating Scale parent and teacher forms.

Results: Mean age of the patients was 9.95 ± 2.03 years. ADHD, ADHD+ODD, and ADHD + CD groups included 81 (24.8 %), 61 (18.7 %), and 184 (56.4 %) patients, respectively. Aggressive behaviors were found to be significantly higher in ADHD + CD group, when compared to ADHD and ADHD + ODD in all evaluation scales used.

Conclusion: ADHD + CD is generally related with more severe aggressive behaviors. ADHD + ODD may predict the progression to more severe aggression and a diagnosis of CD in patients with ADHD.

Keywords: ADHD, comorbidity, Aggression.

PS-007

An adolescent analysis: eating disorders overlapping self-harm tendencies

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Introduction: Eating disorders (ED) are notable mental health problems that primarily affect teenagers and young women. Several reports shows how its prevalence has increased since 1950 [1, 2]. ED behaviors have been cited in more than half of individuals who self-injure [3] and self-injury tendencies are associated with increased ED symptomatology in young adolescents [4].

Objective: The aim of this paper is examine the prevalence of ED in an adolescent sample of a High Resolution consulting room of our hospital and its overlap with self harm thoughts and attempts.

Method: 171 patients (ages 14–18) coming from the family physician were attended in our Young & Adolescents psychiatric services between January 2013 and October 2014.

Results: Although 229 patients were rushed to the psychiatric services, we only attended to 171 (absenteeism was 25.3 %). ED were reported at a total of 18 people (10.5 %). The vast majority was female (94.4 %). 15 people were Caucasian (83.3 %), only 3 were Latinos (16.7 %). 83.3 % corresponded to 14 from 16 years old patients. Only 2 of them (11.11 %) were 17, and a unique case (5.5 %) was 18. Although self-harm thoughts were present in 38.9 %, only 27.8 % had auto injurious behaviors.

Conclusions: In Spain, lifetime prevalence of individual eating disorders is 4.1–6.41 %, which is below of our result [5]. Nevertheless, self-injurious thoughts behaviors and eating disorder pathology have high degree of overlap, as shows another reports [2, 6]. When diagnosing and treating ED, one must also keep in mind co-morbidity in order to provide the best and specific treatment as possible.

1. Rosen D (2010) Identification and management of eating disorders in children and adolescents. *Pediatrics* 126:1240–1253.
2. Hsu L (1996) Epidemiology of the eating disorders. *Psychiatr Clin North Am* 1996(19):4.
3. Svirko E, Hawton K (2007) Self-injurious behavior and eating disorders: The extent and nature of the association. *Suicide Life Threat Behav.* 37:409–421.
4. Ross S, Heath NL, Toste JR (2009) Non-suicidal self-injury and eating pathology in high school students. *Am J Orthopsychiatry* 79:83–92.

PS-008

Anorexia nervosa in adolescent girls and celiac disease serology

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Introduction: Celiac disease (CD) is a common autoimmune disorder characterized by, gluten-induced systemic symptoms and signs, presence of specific antibodies and specific human leukocyte antigen type, and characteristic histological changes in the duodenum. At the onset, patients may present typical manifestation (diarrhea, weight loss), may be oligosymptomatic or they may present atypical symptoms including eating disorders. (Passananti et al. 2013). Anorexia nervosa (AN) presents usually in the adolescence with symptoms partially overlapping CD. Recently Basso and colleagues (2013) reported the prevalence of CD in a population of 177 adolescents affected by AN founding that the overall prevalence of CD in their sample was the same of the general population. They concluded that AN patients may not require regular screening for CD.

Methods: We report a retrospective study on 75 consecutive adolescent female inpatients diagnosed with AN of the restrictive type according to DSM-IV-TR criteria, investigating whether baseline AN-related clinical characteristics could predict a CD diagnosis. We collected the results of CD specific serological tests. If any total antibody determination was over laboratory cut-off, a second determination distinguishing IgA and IgG subtypes was performed. IgA deficiency was investigated as well according to guidelines

(Husby et al. 2012). Adolescent girls with AN were all asked to complete the Eating Disorder Inventory-3 (EDI3) and the Children's Depression Inventory (CDI).

Results: One patient of our series was already carrying a biopsy proven CD diagnosis before arriving to our attention for the AN diagnosis and was under a gluten-free diet.

Anti-TG2 serology allowed the identification of 2 patients who were eventually diagnosed with CD following a duodenal biopsy. Eight additional patients presented with anti-DGP antibodies above cut-off values. None of them presented anti-EMA and so no further investigations were performed. In the remaining 65 cases CD serology was not significant. Neither age, disease duration, BMI, EDI3 specific subscores and composites, nor CDI were significantly associated to any CD measure or characterized a specific group.

Discussion: CD serology might be not so useful as a screening strategy in AN, but we must remember that CD might occur. Moreover, many neuropsychiatric conditions (including eating disorders) have been variably associated to the presence of any CD-antibody positivity, as well as diffuse brain changes (Bilgic et al. 2013). Possibly other presentations such as non-celiac gluten sensitivity might be considered for future investigations (Volta et al. 2014).

PS-009

Anxiety disorders in children: a 2 year follow up study

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Background: Anxiety disorders are among the most common psychiatric disorders in children. Although childhood anxiety has a significant impact on a child's developmental trajectory, only a handful of studies examined the long-term impact of this diagnosis and its treatment.

Methods: With this study we set out to characterize a sample of children from 5 to 13 years old, who were first evaluated at our clinic in 2012–2013 and received a diagnostic of Generalize Anxiety Disorder (GAD), Specific Phobia (SP), Separation Anxiety Disorder (SAD) or Social Phobia (using the DSM IV classification). The sample was collected from our Child Mental Health Outpatient Clinic (Clínica do Parque). For each group, we analysed Individual/family characteristics, presence of comorbid disorders, severity of the clinical diagnosis, treatment options and the clinical outcome. We revisited those children 2 years after the initial diagnosis to evaluate their anxiety levels, comorbid disorders, their global development and the impact of the remaining symptoms on their daily life and on their families.

Results: Most children had a positive clinical outcome after therapeutic consultations with a child and adolescent psychiatry (either a senior doctor or a resident). For the vast majority of the children there was no need for pharmacotherapy nor for weekly psychotherapy sessions. Psychotherapy was mainly used for anxious children with depressive comorbidities and pharmacotherapy for those with severe conditions or with comorbid Panic Disorder, Hyperactivity and Attention Deficit Disorder, Oppositional Disorder and Conduct Disorder.

Conclusion: This 2 year follow up study showed improvement for the vast majority of the children. However, the results were less

positive for those with comorbid disorders, despite having a more intense and diverse treatment. We are especially concerned with a number of children that showed depressive symptoms during or, even, after the treatment for the anxiety disorder.

Keywords: Anxiety disorders, Follow up, Depressive comorbidity.

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PS-010

Asperger syndrome and comorbidity with psychotic disorders

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Objectives: Asperger Disorder was first described in 1944 by the Austrian pediatrician Hans Asperger. The pattern of comorbidity is different from other autistic disorder, with a higher level of psychosis, disruptive behavior, anxiety, and mood disorders. We present a case of Asperger disorder, with psychosis being the predominant reason for the referral.

Methods: 10-year-old girl, who presents new emerging psychotic symptomatology and disruptive behaviour. Normal pregnancy, childbirth and psychomotor development (until 12–15 months); language difficulties (monosyllables, words repeating, speech therapist was necessary). Encopresis and enuresis. Diabetes mellitus-1 since 8 years old. Poor school performance (inattentive, staring off...). Difficulties with peers. She has a 13-year-old brother, diagnosed also of Autism Spectrum Disorder.

Follow-up in Infantile Psychiatry from 6 years old, she was diagnosed Autism Spectrum Disorder (Asperger Syndrome) and ADHD. Later she became a phonetic tic and depressive mood. Nowadays she is very agitated and anxious, and she doesn't play with peers. She has also obsessions with the magic, the prophecy and mystic thoughts. She ran away from home several times. She thinks "people read her mind", she talks about "the good and evil". She tends to take skins from her fingers and from her heels. She pulls out her hair.

Results: During the hospitalization the patient has improved, she has a more coherent speech and she distinguishes the fantasy of the reality. She has proved to be more organized in the activities and tasks of bathroom, though the supervision continues being necessary. Nowadays she is capable of joining the group and taking part of the activities with the others, waiting for her shift and adjusting to established procedure.

Psychotic symptomatology has diminished and, according to the own patient, it has stopped occupying a principal place in her thoughts to be relegated to a secondary paper. The patient received treatment with 4 mg/d of Risperidone.

Conclusions: The differential diagnosis of Asperger Syndrome versus Schizophrenia can be a challenge. Some another comorbidities can mask it. Sometimes, patients come into contact with psychiatrist in the adulthood because they present a variety of psychopathological symptoms; they are described as being odd, with bizarre behavior. Any disorder in the autistic spectrum can present psychotic symptoms context of a brief psychotic episode or mood disorder. It's necessary to make a differential diagnosis, not only with schizophrenia, but also with schizoid and schizotypal disorder.

PS-011

Attention profile in childhood absence epilepsy

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Objectives: Childhood absence epilepsy (CAE) is a common pediatric epilepsy syndrome affecting 10–17 % of all children with epilepsy which occurs in otherwise normal children, more frequently girls, with a strong genetic predisposition. CAE manifests clinically with complete loss of awareness and responsiveness, and cessation of on-going activities.

The association between childhood absence epilepsy and attentional problem has been the focus of researches for many years. Although CAE has been generally presumed to be relatively benign, recent comparative studies suggest that patients with CAE show attention problems after their seizure control are accomplished. The attention can be regarded as the fundamental function for other more complex forms of cognitive activity. Therefore, difficulty of attention can interfere with children's academic performances and daily lives.

This study aimed to compare attention profiles of subjects with childhood absence epilepsy (CAE) to those of children with attention-deficit/hyperactivity disorder (ADHD) and controls.

Methods: We retrospectively reviewed the medical records of 18 subjects (age 7.06 ± 1.5 years, 5 boys) who were diagnosed as having CAE from March 2010 to September 2013 at the Department of Pediatric Neurology of Asan Medical Center, Seoul, Korea. Baseline samples of ADHD and control were acquired from subjects who were participated in author's study 'Identification of intermediate phenotype for ADHD and genome-wide association and linkage analysis'. The parents of 20 children with CAE, 20 children with ADHD and 20 typically developing children completed the ADHD rating scale. All subjects completed the computerized continuous performance tasks (Advanced Test of Attention, ATA). We compared the z-scores adjusted for age and gender of the ATA using analysis of variance.

Results: Children with CAE and ADHD showed higher omission errors and longer reaction time on ATA than the controls. The reaction time variability was higher in children with ADHD than in those with CAE or the controls. CAE subjects with ADHD showed higher commission errors than CAE without ADHD.

Conclusion: These findings suggested that children with CAE were impaired in selective attention.

PS-012

Attention-deficit/hyperactivity disorder rating scale IV subscale analysis by visit in a European, phase 3, randomized, double-blind clinical trial of guanfacine extended release in children and adolescents with attention-deficit/hyperactivity deficit

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Introduction: Guanfacine extended release (GXR), a long-acting α_2A adrenergic agonist, is a non-stimulant medication approved in the USA (children and adolescents) and Canada (children) for the

treatment of attention-deficit/hyperactivity disorder (ADHD). In the primary efficacy outcome from a European, phase 3 clinical trial, the placebo-adjusted, least-squares (LS) mean change from baseline by visit 15 in ADHD Rating Scale IV (ADHD-RS-IV) total score was statistically significant for both GXR and the reference treatment atomoxetine (ATX). Here we report ADHD-RS-IV hyperactivity/impulsivity and inattentiveness subscale scores throughout the dose-maintenance phase of the study.

Methods: In this double-blind, parallel-group study, patients aged 6–17 years were randomized 1:1:1 to receive dose-optimized GXR, placebo or ATX. On completion of a dose-optimization phase of 4 weeks (children aged 6–12 years) or 7 weeks (adolescents aged 13–17 years), patients entered a 6-week dose-maintenance phase (visits 10–15). The maximum permitted dose of GXR was 4 mg/day for children and 4–7 mg/day (depending on body weight) for adolescents. Change from baseline in ADHD-RS-IV hyperactivity/impulsivity and inattentiveness subscale scores were pre-specified as secondary efficacy outcomes.

Results: Of 338 patients who were randomized, 337 were included in both the full analysis set (FAS) and safety population and 272 completed the study to visit 15. The placebo-adjusted, LS-mean change from baseline in ADHD-RS-IV hyperactivity/impulsivity subscale scores throughout the dose-maintenance phase (visits 10–15) were statistically significant for GXR ($p < 0.001$ for all visits; effect sizes 0.79–0.88) and ATX ($p < 0.05$ for all visits; effect sizes 0.33–0.40). For the inattentiveness subscale, placebo-adjusted, LS-mean changes from baseline were statistically significant for GXR ($p < 0.001$ for all visits; effect sizes 0.65–0.73) but not ATX (effect sizes 0.21–0.26). Treatment-emergent adverse events (TEAEs) were reported by 65.8 % on placebo, 77.2 % of patients on GXR and 67.9 % on ATX. Most TEAEs were mild to moderate.

Conclusions: Compared with placebo, GXR treatment resulted in statistically significant and comparable improvements in the symptoms of hyperactivity/impulsivity (medium to large effect) and inattentiveness (medium effect) in children and adolescents with ADHD throughout the dose-maintenance phase.

References:

- Hervas A et al (2014) *Eur Neuropsychopharmacol* 24(12): 1861–1872.

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PS-013

Atypical early neurodevelopmental characteristics in childhood onset depression- two case-control studies

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Introduction: Early difficult temperament has been documented as risk for psychopathology later in life and there are studies documenting the role of perinatal problems and developmental delay in the development of different psychiatric disorders in children and in depressed adults. We aimed to extend our understanding about the etiology of childhood onset depression (COD) by comparing clinically depressed kids to healthy controls and to their unaffected siblings regarding atypical early temperamental and neurodevelopmental characteristics. Hypothesis: (1) Perinatal problems, developmental delay, and difficult temperament are more frequent in children with COD than in community control kids and (2) in their unaffected siblings. Method: Participants were children with COD ($N = 648$ and $N = 95$ in case of the comparison to siblings), their

unaffected siblings ($N = 97$) and community control kids ($N = 648$) from elementary schools. Diagnoses were based on DSM-IV criteria. In case of controls depressive symptoms were measured by self rating scale. Mothers provided developmental data in a face-to face structured interview (COD kids and unaffected siblings) and via self-rated version of the same interview about controls. Using the data from this interview we created four scales of atypical development: total neurodevelopmental problems, perinatal problems, developmental delay, and difficult temperament.

Results: Comparing the depressed to the control group depression significantly associated with the perinatal ($F = 10.73$; $p = 0.0011$), the developmental ($F = 21.73$; $p < 0.0001$), the temperamental ($F = 90.38$ $p < 0.0001$) and the total score ($F = 80.09$; $p < 0.0001$) as well. The difficult temperament scale differentiated significantly ($F = 5.556$; $p = 0.019$) between the depressed and unaffected siblings group as well. Regarding this scale significant depression status-X-sex interaction was found ($F = 2.908$; $p = 0.036$). Across our study groups the difference was the most robust regarding the item of hard to comfort, which was six times frequent in the depressed group (28.59 %) comparing to community controls (5.25 %) and about twice as frequent than in unaffected siblings (13.4 %), indicating that unaffected siblings were between the depressed and normal controls.

Conclusions: Early neurodevelopmental characteristics elevated the risk for COD. The variables that refer to difficult temperament are emerged with significantly higher frequency in unaffected siblings than in community controls. Improving the support for mothers dealing with infants with difficult early temperament could have positive effect in the prevention of COD later in childhood.

Keywords: Childhood onset depression, Temperament, Early neurodevelopmental problems.

PS-014

Body image: several influences

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Introduction: The body image is defined as the internal representation of the individual external appearance. It is multidimensional, so that comprises cognitive, emotional, behavioural and relational aspects. All these variables are undergoing major changes throughout life, influencing the perception of the body. Adolescence is a period of vulnerability to develop a sense of dissatisfaction with body image. Parents and peers are important figures in the transmission of ideas and cultural beauty models and attitudes related to physical appearance, which are often associated with the dissatisfaction of young people with their body image.

Objectives: The purpose of this study is to evaluate the variables that may predict disturbs of the body image (mainly family and peer factors).

Methods: The sample is composed by 73 adolescents, ages ranging between 12 and 17 years old. Of them, 38 attend the Child and Adolescent Psychiatry and Mental Health Department and 35 were selected among general population. Both samples answered the BSQ (Body Shape Questionnaire). For data analysis, the authors used a regression model.

Results: In both samples, BSQ means don't indicate body image distortion. However, results are quite different between groups. In clinical sample, BSQ values are significantly higher than the general sample ones. In the clinical sample, dissatisfaction with peers is a risk factor for body image distortion. In the general sample, both peer and

family factors influence body image satisfaction, but aren't risk factors for distortions, per se.

Conclusions: Dissatisfaction with the peer group is a risk factor for negative body image of adolescents, in clinical sample. The same is not true in the general population, in what appears to be important a combination of several factors. Thus, in an inverse way, it seems that the relationships developed in the peer group can function as a protective factor and mitigate the negative impact that certain factors of individual or environmental risk have in the perception of body image.

Keywords: Body image, Relationships, Family, Peers.

PS-015

Bordering on pediatric bipolar disorder: clinical differentiation from pathological personality traits

Abstract type: Symposia type A

Thematic area: Clinica Disorders: Mood and anxiety disorders

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Bordering on pediatric bipolar disorder: clinical differentiation from pathological personality traits

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Background: Bipolar disorder is one of the most controversial diagnoses in child and adolescent psychiatry. The issue of comorbidity versus differential diagnosis has been in the forefront of pediatric bipolar disorder research. However, as opposed to adult literature, there is a relative lack of studies focusing on such topic regarding personality disorders in children and adolescents. Core features shared between bipolar disorder and personality disorder traits have been described such as emotional dysregulation and impulsivity symptoms, potentially increasing the odds of misapplying diagnoses while entailing costly treatment implications. Moreover, in keeping with these difficulties, one of the grand challenges is to unravel quality domains and differentiating parameters which might advance their clinical discrimination. It is our aim to refine candidate variables for differentiating bipolar disorder from personality disorders in children and adolescents and assist the design of studies pursuing to further their clinical distinction.

Method: Proposed criteria for bipolar disorder and personality disorder traits are outlined. A selective review of the most recent evidence on the interpretation of similarities or differences in clinical assessment and diagnosis was conducted. Assessment approaches are discussed.

Results: Despite the lack of studies in this regard, it seems that the phenomenological profile of mood states, the longitudinal course of illness and emotional dysregulation symptomatology are matters of utmost clinical relevance in the diagnostic process. In addition, such an approach should encompass the developmental framework of the child as well as family environment variables.

Conclusions: With the advent of DSM-5, the proposal of an alternative model for personality disorders raises new avenues and new challenges in the diagnostic dimensions granting reliable and stable conceptions of personality traits and domains in childhood. Precise nosology and a common phenotype perspective regarding pediatric bipolar disorder are however still lacking. While the scientific interface between bipolar and personality disorders remains unclear, this characterization may push forward additional evidence in the field of comorbidities in childhood bipolar disorder.

Keywords: Pediatric Bipolar disorder; Personality disorders; Child psychiatry; Differential diagnosis; Comorbidity

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PS-016

Cannabis use in adolescence and bipolar disorder: a case report and review of the literature

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Introduction: If the link between cannabis use and psychotic states seems established, its relationship with mood disorders is still far less studied. According to some authors there is a high frequency of cannabis use in bipolar patients and a higher risk of developing a mood disorder in cannabis users especially in adolescence.

Objective: The aim of this presentation is to demonstrate a case of cannabis-induced mania in an adolescent and to discuss our case through a literature review.

Case report: C. a 14 year old teenager, who was brought to our child psychiatry emergency by his mother in an array of psychomotor excitement. C. was with no known psychiatric neither medical personal history. He has two sisters with intellectual disabilities and a paternal aunt followed for an undisclosed psychiatric disorder. Our patient is enrolled in 9th grade basic education, he never repeated. He admitted to using cannabis since December 2011. Then, he had taken it daily (about 500–700 mg of cannabis per day) until 3 weeks before the consultation.

The diagnosis of mania according to the diagnostic criteria of the DSM IV TR was selected. He received Haldol injection and mood stabilizer (Depakine) during the first days and he didn't require an hospitalization. The complete resolution of the patient's manic episode was obtained after 3 weeks. Then, he took a mood stabilizer (Depakine) for 2 years without relapse.

As his condition remains stable and at his insistence to stop medication, the mood stabilizer was discontinued. Two months later, he returned to us with mania. Bipolar disorder type 1 was then selected according to DSM IV TR.

Conclusion: We will discuss the involvement of cannabis use on the onset clinical course and prognosis of various mood disorders and bipolar disorder in particular through a literature review.

Keywords: Substance abuse, Bipolar disorder, Adolescence.

PS-017

Child attention deficit hyperactivity disorder: a study on temperament and character factors

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Aim: The study of children's personality, as well as its constitution and development, has spawned the emergence of different physiological theoretical models. Despite discrepancies among them, it's understood that certain central dimensions exist that are shared in every theoretical frame. Knowing whether certain personality traits that are characteristic of children who are diagnosed as having Attention deficit hyperactivity disorder (ADHD) exist, and whether there are differences among its different subtypes might contribute to superior therapeutic detection and clinical guidance.

Method: Personality traits are compared (temperament and character) through Cloninger's Junior Temperament and Character Inventory (JTCI) in a sample of 37 children diagnosed as having ADHD (according to the diagnostic criteria of Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, DSM-IV) with a sample of 32 non-attended controls in mental health. The age of the population range from 9 to 13 years, both included.

Results: The children suffering ADHD are more impulsive and less persistent in the temperament dimensions than those not diagnosed as having ADHD, obtaining a higher novelty seeking (NS), and a lower persistence (P). Likewise, in the dimensions of character, they have a lower self-esteem and they feel less integrated than the children diagnosed as having ADHD, with lower self-directedness (SD) and cooperativeness (C). Albeit differences among subtypes of ADHD were sought, no one was found.

Conclusion: Children diagnosed as having ADHD share distinct personality traits from the control population, without differences among ADHD subtypes. The JTCI can contribute to a better detection of children with ADHD.

1. Cloninger CR, Przybeck TR, Svrakic DM (1991) The Tridimensional Personality Questionnaire: U.S. normative data. *Psychol Rep* 69(3 Pt 1):1047–1057.
2. Cloninger CR, Svrakic DM, Przybeck TR (1993) A psychobiological model of temperament and character. *Arch Gen Psychiatry* 50:975–990.

PS-018

Children's eating attitudes test: reliability and validation in Japanese school children

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Objective: Japanese female adolescents have recently become thinner compared with female adolescents in other developed countries. According to the 2013 reports of the Japanese Ministry of Health and Welfare, the percentage of female adolescents whose body mass index was less than 18.5 was 21.5 %. The prevalence of abnormal eating attitudes is increasing in younger children. In particular, it is easy for elementary and junior high school students to follow an extreme diet as they become sensitive to social and cultural expectations. An excessive diet may also lead to eating disorders (ED). Therefore, the accurate assessment of eating attitudes in children is necessary in school mental health. The Children's version of Eating Attitudes Test with 26 items (ChEAT-26) is widely used internationally to assess abnormal eating behavior. The purpose of this study is to validate the Japanese version of the ChEAT.

Method: The survey was first approved by three prefectural education committees and 49 elementary or junior high schools covering both urban and rural communities were selected. Participants included 7,076 schoolchildren aged between 10 and 15 years old (mean age 11.4, 48 % boys) and 42 female children with ED (mean age 13.2 years). The ChEAT data of children with ED were collected from members of Japanese Society of Psychosomatic Pediatrics. The Japanese version of ChEAT was translated by two independent bilingual translators and then back-translated by another translator. Factor analysis of content was performed using varimax rotation. The optimal cut-off point was evaluated using receiver-operating characteristic (ROC) curve.

Results: The mean ChEAT score was 7.2. The mean score was significantly higher in urban than rural areas, and was higher with increasing age. Five factors explained 46 % of the variance. Cronbach's α was 0.78 for the total scale. The five factors were mostly similar with previous literature excerpt interpretation of reverse-score items (Int J Eat Disorder 2011; 44:540–46). The area under the ROC curve was 0.83. Sensitivity was 0.78 and specificity was 0.84 for a cut-off of 13.

Conclusion: The Japanese version of ChEAT is a reliable and valid psychometric tool that may be useful as triage and assessment of children with abnormal eating behavior.

PS-019

Childhood eating disorders in hospital treatment

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Introduction: Epidemiological studies show an increased incidence of Eating Disorders (ED) in latest decades. This group of disorders have gained socio-sanitary relevance for the severity and complexity of both diagnosis and treatment. Recent data suggest an increasingly earlier age of onset of ED symptoms and a difficulty to detect them in children and adolescents, as they have their own specificities on symptomatology, diagnosis and evolution.

Objectives: To compare the profile (clinical symptoms, sociodemographic characteristics, treatments) of patients admitted to the Pediatric Hospital Materno Infantil of Gran Canaria with ED in that specific age group (<14 years) with the inpatients in the General Hospital.

Method: Analysis of clinical and statistical data of patients with Eating Disorders in inpatient treatment during the period 2011–2014 in Gran Canaria.

Results: Analysis of Demographic data (age, sex), clinical variables (BMI, onset of symptoms, food restriction, bingeing, purging/compensatory behaviors, altered body image perception, comorbid mental disorder), previous treatment, treatment during hospitalization (psychological, psychopharmacological, nutritional support, nasogastric tube, admission time) and evolution.

Conclusions: Eating Disorders in childhood and early adolescence present their own particular characteristics that indicate the need for special attention in this age group to encourage appropriate action from Pediatrics, and the referral and rapid intervention by specialist services, to try to avoid more invasive treatments and ultimately the chronicity of the disorder.

PS-020**Clinical and neurocognitive predictive factors for good response to methylphenidate treatment in a ADHD sample in Spain: a naturalistic follow-up study**

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Objective: To review the clinical characteristics, course and treatment response of children with ADHD in our Outpatient Clinic sample, in a longitudinal, naturalistic follow-up study at the University of Navarra, in Pamplona, Spain and to describe predictive factors of good response to treatment with methylphenidate (MPH).

Methods: 497 patients were included meeting criteria for ADHD (Age 6–18, and main diagnosis of ADHD not due to substance abuse, IQ <70, or Autistic spectrum disorder, not participating in a clinical trial). Patients were evaluated by a trained Child & Adolescent Psychiatrist using a K-SADS interview template, to evaluate baseline symptoms (Du Paul/SNAP/CGI), comorbidity course of illness (CGI at endpoint), and endpoint dose that achieved good response. We also evaluated patients with neuropsychological testing, including WISC, CPT & Stroop.

Results: Mean (\pm SD) age of our patients was 11.3 ± 3.2 years old. 82 % of patients were male, and 48.90 % had ADHD with comorbidity (ODD, Depression, Anxiety Disorders and Bipolar Disorder). According to the DSM-IV we classified ADHD into two groups including inattentive subtype (31.7 %) and hyperactive–impulsive and combined subtypes (68.3 %). Mean Baseline CGI-S score was 4.35 ± 0.6 . Baseline ADHD-RS was: 31.1 ± 9 . Mean of follow up 27 months (15–43 RIC). The most frequent ADHD-RS symptoms were: Disorganized, Avoids mental effort, distracted, and fidgets. Of the patients treated with MPH, 79.8 % of patients had full remission of symptoms, with a mean dose of 1.18 ± 0.46 mg/kg/day. There was an association of worse response with lower IQ, and lower scores in “forgetful” and “is spiteful and vindictive” items at ADHD-rs, and ODD and Depression comorbidities, predict decreased likelihood of response to MPH.

Conclusion: The mean dose required to control symptoms was 1.2 mg/kg/day. There was some association between some neuropsychological results and a worse response to MPH, but these cannot be still used to predict response.

References:

- Polanczyk G, de Lima MS, Horta BL, Biederman J, Rohde LA (2007) The worldwide prevalence of ADHD: a systematic review and meta-regression analysis. *Am J Psychiatry* 164:942–948
- Swanson et al (1983) SNAP-IV Rating Scales a revision of the Swanson, Nolan and Pelham (SNAP) Questionnaire

PS-021**Clinical characteristics of early onset eating disorder in Japanese boys: a retrospective observational study**

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Aim: The aim of this study is to elucidate clinical characteristics of early onset eating disorder (ED) in Japanese boys compared with

girls. Our main hypothesis is that ED boys have earlier onset and more autistic features than ED girls.

Background: Previous studies have discussed little on the clinical characteristics of early onset ED boys, albeit their low but constantly growing prevalence.

In Japan, the prevalence of ED had a tenfold increase in 20 years since 1980. In the late 1990s, the prevalence of Anorexia Nervosa (AN) had quadrupled. Furthermore, the proportion of the teen age group is growing among the ED population year by year, suggesting the trend of its earlier onset. Therefore, early intervention and treatment for ED is an important issue.

Method: This study is a retrospective observational study. Participants included 161 children (age 12.14 ± 1.64 years) with a DSM-IV-TR diagnosis of ED between January 5, 2007 and November 10, 2014 at the department of child and adolescent psychiatry, Kohnodai Hospital, National Center for Global health and Medicine. Tokyo Autistic Behaviors Scale (TABS) was used to evaluate the autistic features of the participants. Children were divided into two age groups: the children group (8–10 years) and the adolescents group (11–15 years). The number of children with ED and participants with comorbid psychiatric disorders was statistically compared between boys and girls by the Chi square test for each group. The total score of TABS was statistically compared between boys and girls by the Mann-Whitney U test for each group.

Result: Participants were 13 boys and 148 girls. The number of boys and girls were 7 and 23 for the children group and 6 and 125 for the adolescent group respectively. The proportion of the children group was significantly higher for boys than girls ($p < 0.01$). The mean TABS total score of boys and girls were 7.9 ± 5.00 and 5.36 ± 3.82 respectively and showed significant difference ($p < 0.01$).

Conclusion: Boys' ED had an earlier onset and more autistic features than girls' ED. Autistic features might be related to earlier onset of ED.

PS-022**Clinical features and new diagnostic criteria in childhood eating disorders (6-13Y)**

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Introduction: Childhood eating disorders (ChED) have specific clinical features that does not comply with usual classification diagnosis criteria. The new diagnosis Avoidant Restrictive Food Intake Disorder (ARFID) of DSM-5 could improve the evaluation and diagnosis in this patients group.

Objectives: To describe and analyze clinical features of eating disorders in children (6–13 years.) and comparing different diagnostic criteria.

Methods: Clinical charts of 250 children seeking for treatment by feeding problems (2009–2013) were reviewed on social-demographic, clinical variables and diagnostic features. DSM-IV-TR, Great Ormond Hospital Diagnosis (GOS) and DSM-5 were used as diagnostic criteria.

Results: Gender: 200 female (80 %) and 50 male (20 %); mean age 11.15 years. (s.d. 1.7). Early eating disorder history: 70 (35.7 %); mean clinical duration of ED: 11.97 months (s.d.15.27). Nutritional status: average Body Mass Index percentile by age and gender at first evaluation: 10–20. Psychiatric family history: 81 (41.3 %). Diagnostic: DSM-IV-TR Diagnosis: Infantile feeding disorders: 15 (5.9 %) Restrictive anorexia nervosa (RAN):113 (45.3 %), Eating

disorder no otherwise specified (EDNOS): 105 (41.9 %), Purgative anorexia nervosa (PAN): 15 (5.9 %), Bulimia nervosa (BN): 2 (0.8 %). G.O.S. Diagnosis: Infantile Anorexia: 15 (5.9 %), RAN 113 (45.3 %), Functional dysphagia: 33 (13.8 %); Selective eating: 39 (15.5 %); Food Avoidance Emotional Disorder (FAED): 11 (4.3 %); PAN: 15 (5.9 %); BN 2 (0.8 %); DSM-5 diagnosis: RAN 116 (46.3 %), PAN 15 (5.9 %), BN 2 (0.8 %), EDNOS 29 (11.6 %), ARFID 86 (35.1 %). Total Comorbidity 117 (54.9 %): Anxiety Disorder: 55 (22 %); Affective Disorder: 50 (20 %); Oppositional defiant disorder 12 (5 %); Obsessive-Compulsive Disorder 10 (4 %); Attention deficit hyperactivity Disorder: 10 (4 %). Diagnosis by age was: Diagnosis ChED <12 years (122): 90 (73.8 %) girls, 32 (26.2 %) boys. RAN: 27 (22.13 %); EDNOS: 8 (7.3 %); infantile anorexia: 5 (4 %); ARFID 60 (24 %). Comorbidity 65 (65.3 %). Diagnosis 12–13 years (125): 107 (85.7 %) girls, 18 (14.3 %) boys. RAN: 65 (70.7 %); EDNOS: 9 (9.8 %); infantile anorexia: 3 (2.4 %); PAN: 6 (6.5 %); BN: 2 (2.2 %), ARFID 15 (12 %). Comorbidity 60 (53.1 %).

Conclusions: The younger the population is the higher the incidence of ChED in males. The comorbidity is also higher in these population, specially depressive and anxiety disorders.

Almost half of eating disorders 6–13 years old patients are diagnosed of EDNOS when DSM-IV-TR criteria are applied but only 10 % when DSM-5 criteria are used. The difference is reassigned to the ARFID diagnostic group, specially in children younger than 12 years old. The new diagnosis (ARFID) is useful in this young population.

PS-023

Clinical global impressions-improvement scores by visit in a european, randomized, double-blind, placebo and active-controlled clinical trial of guanfacine extended release in children and adolescents with attention-deficit/hyperactivity disorder

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Introduction: The non-stimulant guanfacine extended release (GXR) is a long-acting, α_2A adrenergic receptor agonist and is approved in the USA (children and adolescents) and Canada (children) for the treatment of attention-deficit/hyperactivity disorder (ADHD). In the primary efficacy outcome from a European, phase 3 clinical trial, the placebo-adjusted, least-squares mean change from baseline in ADHD Rating Scale IV was statistically significant for both GXR and the reference treatment atomoxetine (ATX). Here we report the key secondary efficacy outcome, Clinical Global Impressions-Improvement (CGI-I), throughout the dose-maintenance phase of the study.

Methods: This was a randomized, double-blind, parallel-group, efficacy and safety study in which children and adolescents (aged 6–17 years) with ADHD were randomized 1:1:1 to receive dose-optimized GXR, placebo or the reference treatment ATX. On completion of a dose-optimization phase of 4 weeks (children aged 6–12 years) or 7 weeks (adolescents aged 13–17 years) patients entered a 6-week dose maintenance phase (visits 10–15). The maximum permitted dose of GXR was 4 mg/day for children and 4–7 mg/day (depending on body weight) for adolescents. Improvement in CGI-I was defined as a score of 1 (very much improved) or 2 (much improved).

Results: Of 338 patients randomized, 337 were included in both the full analysis set (FAS) and safety population, and 272 completed the study to visit 15. The proportions of patients (95 % confidence interval) in the FAS with improved CGI-I scores are presented below.

Visit	Proportion of patients (%)		
	Placebo	GXR	ATX
10	43.2 (34.0, 52.5)	63.4 (54.5, 72.3)**	53.6 (44.3, 62.8)*
11	41.4 (32.3, 50.6)	62.5 (53.5, 71.5)**	54.5 (45.2, 63.7)*
12	45.9 (36.7, 55.2)	61.6 (52.6, 70.6)*	52.7 (43.4, 61.9)
13	44.1 (34.9, 53.4)	62.5 (53.5, 71.5)**	50.0 (40.7, 59.3)
14	44.1 (34.9, 53.4)	65.2 (56.4, 74.0)***	54.5 (45.2, 63.7)
15	44.1 (34.9, 53.4)	67.9 (59.2, 76.5)***	56.3 (47.1, 65.4)*

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$ vs placebo

Treatment-emergent adverse events (TEAEs) were reported by 65.8% of patients on placebo, 77.2% on GXR, and 67.9% on ATX. Most TEAEs were mild to moderate.

Conclusions: Compared with placebo, statistically significantly higher proportions of children and adolescents with ADHD receiving GXR experienced improved CGI-I scores throughout the dose-maintenance phase of this phase 3 study that confirmed clinically meaningful response with GXR treatment.

1. Hervás A et al (2014) Eur Neuropsychopharmacol 24(12):1861–1872.

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PS-024

Clinical predictors of response mph in ADHD. Preliminary study

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Introduction: Methylphenidate therapy is considered first-line drugs for ADHD. Currently there are no methods available to predict which patients will respond.

Objectives: In the present study we investigated whether an indicator of clinical response to methylphenidate could be developed for children with ADHD, using psychopathological measures.

Method: 77 children with ADHD were included between 5 and 14 years old with no history of medication and without psychiatric comorbidity. It was an open study in which all patients were treated with MPH for 4 weeks. Response criteria chosen a priori consisted of (1) Clinical Global Impression Severity Scale < 3 and (2) Children's Global Assessment Scale > 70 at 4 weeks. Of 77 subjects, 52 were classified as good responders (67.5 %) and 25 patients (32.5 %) and non-responders to MPH with no significant differences in relation to the Total Intellectual Capacity between groups.

Results: By regression analysis multivariate to the prediction of clinical response to MPH is obtained that the most important clinical variables to classify were anxiety disorders (OR = 6.36; $p = 0.016$), aggression (OR = 5.50; $p = 0.024$), outsourcing (OR = 5.50; $p =$

0.024), total problems (OR = 3.96; $p = 0.046$) and DERS Severe (OR = 4.12; $p = 0.048$) obtained in the Child Behavior Checklist. The presence of 'sullen and resentful symptom (OR = 6.56; $p = 0.015$) and the simultaneity of the three symptoms of severe emotional lability (OR = 6.96; $p = 0.013$) in the Conner 's Parent Rating Scale.

Finding: This study suggests that the prediction of response to MPH in children with ADHD, it is an encouraging step towards the search for a reliable and clinically useful method to reduce the number of children exposed to MPH unnecessarily.

PS-025

Cognitive development and adaptive functions in a sample of 42 children with Down syndrome, aged between 12 to 36 months

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Background: Down syndrome, the most common genetic cause of intellectual disability, involves a delay in cognitive and psychomotor development, particularly in motor and language skills.

Aim: The purpose of our research is to analyze the relationship between cognitive development and adaptive functions, and to assess their patterns of change with age in children with Down syndrome.

Methods: Our sample contemplated 42 children with Down syndrome (from the outpatient Child and Adolescent Mental Health Clinic, San Gerardo Hospital, Monza, Italy), aged 12–36 months. They were divided into two different age groups: Group 1 consisted of 8 children between 12 and 17 months (19 %) and group 2 consisted of 34 children between 18 and 36 months (81 %). Cognitive development was evaluated using the Griffiths' Mental Development Scales: GMDS 0–2 for 20 children between 12 and 23 months and GMDS 2–8 for 22 children between 24 and 36 months. Adaptive functions were evaluated by administering the Vineland Adaptive Behaviour Scales (VABS) (Sparrow, Balla, Cicchetti, 2003) to one of the two parents of the 34 children between 18 and 36 months.

Results: General quotient (GQ) of GMDS decreased with age, from an average of 62 in Group 1, to an average of 58 in Group 2. Also on the VABS (administered to children between 18 and 36 months) the value "age equivalent x 100/chronological age" decreased with age, even if more slowly than the cognitive level.

This value ranged from 36.9 to 112.9 with an average of 71.77. In the Communication and Motor scales children showed the lowest scores: 64.37 in group 1 and 63.81 in group 2. These results were similar to the scores of GMDS in the same areas. The value on the Daily Living Skills scale was 82.20 and on the Socialization scale was 83.00. Furthermore our study showed that the level of adaptive functions was higher than the level of cognitive development for all ages and areas examined.

Discussion: Scores of cognitive development (GMDS) and adaptive functions (VABS) decrease with age. However, adaptive functions are significantly higher than cognitive functions as the children grow. Socialization and Daily living skills scales show the best scores; followed by the Communication and Motor scales.

PS-026

Cognitive remediation therapy in attention deficit hyperactivity disorder

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Background: Attention-Deficit Hyperactivity Disorder (ADHD) is associated with neuropsychological deficits including executive and attentional impairments. The cognitive remediation therapy is to be consider as a new promising technique designed to improve the neurocognitive abilities damaged in ADHD.

The aim of our study was to adapt and apply the cognitive remediation program CRT (Cognitive Remediation Therapy) for children and adolescents with ADHD and to evaluate its effectiveness on attentional and executive abilities.

Methods: Cross-sectional study involving children and adolescents with ADHD, recruited in clinical population using the Conners Scale and whose diagnosis was confirmed by the K-SADS-PL questionnaire.

The CRT program was conducted at the rate of one session per week of 40 min each.

The Attentional Network Test (ANT) was administered prior to the intervention and one week after.

Results: Of the 30 patients included, 14 had reached the end of the program. Among them, nine patients passed the attentional test post CRT, thus constituting our final sample. Their average age was 9 years. The mean number of sessions performed was 14.5. Post CRT, the mean of patient's response time was found to be shorter ($p = 0.004$) and the frequency of omissions errors was also lesser than that found at the initial assessment. Patients also committed fewer errors in incongruent situations in post program, with a significant improvement of the conflict effect ($p = 0.009$) signing a better executive control.

Conclusion: Cognitive remediation is a promising new modality in the treatment of ADHD. Further research is needed to better document its effects and the optimal conditions required for setting it up.

PS-027

Comorbilidad psiquiátrica en los trastornos del espectro del autismo sin discapacidad intelectual

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Introducción: La comorbilidad psiquiátrica en los Trastornos del Espectro del Autismo (TEA) es altamente frecuente; en la mayoría de los estudios se describe una comorbilidad en torno al 72%. Entre las patologías más frecuentes destaca el TDAH, los trastornos del estado de ánimo, los trastornos de ansiedad y los trastornos por tics. Resulta habitual que los niños y adolescentes con comorbilidad presenten varias patologías psiquiátricas simultáneas asociadas al TEA.

Objetivo: Describir la comorbilidad psiquiátrica en los pacientes diagnosticados de TEA sin discapacidad intelectual que realizan seguimiento psiquiátrico en la Unidad de Salud Mental Infanto-Juvenil y comparar los datos con la bibliografía existente.

Metodología: Se revisó la historia clínica de los pacientes diagnosticados de TEA de una de las consultas de la Unidad de Salud Mental Infanto-Juvenil de Burgos y se excluyó a los que presentaban

discapacidad intelectual (capacidad intelectual <70 objetivada mediante WISC-IV).

Resultados: Se encontraron 40 pacientes diagnosticados de TEA sin discapacidad intelectual de los 434 revisados; tan sólo 6 eran chicas y 34 eran varones. En el momento de la revisión 26 de ellos eran niños (0 a 12 años) y 14 eran adolescentes (13 a 18 años). De los 40 casos encontrados, 32 de ellos presentaban alguna comorbilidad, con la siguiente distribución: 13 presentaban un trastorno por déficit de atención con hiperactividad como diagnóstico principal, 1 tenía un trastorno del comportamiento, 4 estaban diagnosticados de trastornos afectivos, 8 tenían algún trastorno de ansiedad, 1 presentaba un Trastorno Obsesivo Compulsivo comórbido y 3 tenían mutismo selectivo. En un caso el diagnóstico principal fue un trastorno del sueño y en otro un trastorno psicótico. Además, 12 de ellos presentaban más de una patología comórbida simultáneamente. Asimismo, 4 tenían una capacidad intelectual límite y 2 estaban diagnosticados de altas capacidades intelectuales.

Conclusiones: El 9.21% de los niños y adolescentes de la consulta de psiquiatría tenían un TEA como diagnóstico principal; el 15 % eran chicas, prevaleciendo los varones, como describe la bibliografía. El 80 % de los pacientes con TEA de alto funcionamiento seguidos en la consulta presentaban alguna comorbilidad, cifra similar a la de la mayoría de los estudios. El 32.5 % tenían un TDAH como principal diagnóstico comórbido, siendo el segundo más frecuente los trastornos de ansiedad con un 28.1 % de los casos y un 12.5 % de trastornos afectivos. El 37.5 % de ellos presentaba más de una comorbilidad.

PS-028

Comparison of autism spectrum disorder and Schizophrenia using the rorschach test

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In this study, we have aimed to reveal quantitative tendencies of the Rorschach response of people with Autism Spectrum Disorder (ASD) and Schizophrenia. Forty participants were recruited from the outpatient clinic of the Department of Psychiatry, Nara Medical University School of Medicine and Mental Clinic Kyo. Twenty patients were diagnosed with ASD, and 20 gender-, age- and, IQ-matched patients were diagnosed with schizophrenia according to DSM-5 by skilled psychiatrists. Exclusion criteria included any neurological disorder, a head injury, a serious medical condition, or a history of substance abuse/dependence. Two senior psychologists, well trained in psychological testing and certified in the CS method, performed the Rorschach test according to the standard procedures of administration and scoring in Exner Comprehensive System. The Exner Comprehensive System requires 14 or more responses for interpretative validity. They were independent of the project insofar as they responsible in any way for the treatment or assessment of the patients. They performed the Rorschach test and scored to each of the patients. We examined Rorschach variables in ASD group and schizophrenia group. We found significant differences in six variables of Rorschach test date on Comprehensive system. Schizophrenia group had significantly higher scores on D, Adj D, DQo and FQ- than ASD group. On the other hand, schizophrenia group had significantly lower scores on active, and DQ+ than ASD group. It is suggested that ASD group showed lower strength of stress, more simplex recognition and more keeping reality testing ability than Schizophrenia group. Our research indicates possible utility of the Rorschach test in differential diagnosis between ASD and schizophrenia.

Keywords: Rorschach Test Comprehensive System, Autism spectrum disorder, Schizophrenia.

PS-029

Comparison of family functioning and psychiatric comorbidities of children with attention deficit hyperactivity disorder and disruptive mood dysregulation disorder

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Objective: Children with ADHD combined type (ADHD-C), Disruptive Mood Dysregulation Disorder (DMDD) and healthy controls (HC) were compared in respect to the sociodemographic features, psychiatric comorbidities, behavioral patterns and family functioning. **Method:** The clinical sample consisted of 99 children and adolescents (75 with ADHD-C, 24 with Severe Mood Dysregulation (SMD) between the age of 7 and 18. According to the recent DSM-V DMDD Classification, we excluded 6 children with SMD who had symptoms of hyperarousal. Final clinical samples were consist of 93 children and adolescents (75 with ADHD-C, 18 with DMDD) and 15 healthy controls. These groups were identified by using the Schedule for Affective Disorders, and Schizophrenia for the School-Age Children–Present and Lifetime Version (K-SADS-PL). Conners' Parent and Teacher Rating Scale-revised long form (CPRS-R: L and CTRS-R: L), the Wechsler Intelligence Scale for Children-Revised (WISC-R), the Sociodemographic Questionnaire (SQ) and the Mc Master Family Assessment Device (FAD) were administered to the research groups. **Results:** The mean parental age and rate of divorce in the DMDD group were significantly higher than the other two groups ($p < 0.05$). DMDD group's rate of life time psychiatric comorbidity (% 89) was significantly higher than the ADHD-C group ($p < 0.05$). %55 Children with DMDD had also ADHD diagnoses. Most of the children with DMDD had two or more psychiatric comorbidity and this was significantly higher than the ADHD-C group's comorbidity ($p < 0.05$). In "Oppositional", "Hyperactivity", "Social Problems", "ADHD Index", "Impulsive", "Emotional Lability" and "Conners' Global Index" subscales of CPRS-R: L, DMDD group's average scores were significantly higher than the ADHD-C and the control groups' scores ($p < 0.05$). In "Communication", "Affective Responsiveness" subscales of FAD, DMDD group's average scores were significantly higher than the ADHD-C group's scores ($p < 0.05$). In "Affective Involvement", "General Functioning" subscales of FAD, DMDD group's average scores were significantly higher than the ADHD-C and the control groups' scores ($p < 0.05$). **Conclusion:** Children with DMDD were distinguished from the children with ADHD-C by their high comorbidity rate, more impaired behavioral patterns and family functioning. Combination of therapeutic approaches focusing on both the family and the child functioning and also parent-child relationship will likely be needed to prevent the long- term negative consequences of chronic irritability in children.

PS-030

Comparison of the children with learning disability diagnoses at different IQ levels

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Objective: Specific learning disability (SLD) is defined as a disorder in one or more of the learning processes involved in understanding or in using language, spoken or written, that may manifest in significant difficulties affecting the abilities of the children. We aimed to examine the similarities and differences in sociodemographic features, SLD Battery Profiles, Wechsler Intelligence Scale for Children- Revised Form (WISC-R) subtests and comorbidities of children who have very superior intelligence quotient (I.Q.) (I.Q. >130), LD with very superior I.Q. and LD with a low average I.Q. (I.Q.: 80–89).

Method: This retrospective study includes 97 children between 2013–2014: 35 with superior I.Q., 31 with superior I.Q. and a LD diagnosis and 31 with low average I.Q. with a LD diagnosis. These groups were identified by using the Schedule for Affective Disorders, and Schizophrenia for the School-Age Children–Present and Lifetime Version, SLD Battery and WISC-R. Sociodemographic Questionnaire (SQ) was also administered to the research groups.

Results: There were no significant differences in age, gender, parental age, family structure, medical illness comorbidity and parental psychopathology variables of the SQ ($p > 0.001$). Most of the parents of the children with superior I.Q. and with superior I.Q. and a LD diagnosis, had university degree which were significantly different than the parents of the children with low average I.Q. and a LD diagnosis ($p < 0.001$). The most common psychiatric comorbidity was ADHD in all groups. Psychiatric comorbidity rate was significantly higher in the children with low average I.Q. and a LD diagnosis ($p < 0.001$). There were no significant differences in WISC-R subtests between the children with superior I.Q. and the children with superior I.Q. and a LD diagnosis ($p < 0.001$). In SLD Battery, there were significant differences in “Gesell Figures” and “Dictation Error” subtests between the children with low average I.Q. and a LD diagnosis and the children with superior I.Q. and a LD diagnosis ($p < 0.001$). Parental education was positively correlated with all subtests of the WISC-R. In Spearman Correlation Test, “Gesell Figures” and “Cross Lateralization” subtests in SLD Battery, were positively correlated with all WISC-R subtests.

Conclusion: “Gesell Figures” and “Dictation Error” subtests could be effected by the level of the I.Q.. Parental education could be related to I.Q., however the reciprocal relation has not been proven yet. Children with low average I.Q. with a LD diagnosis should be carefully evaluated for their psychiatric comorbidities.

PS-031

Conversion disorder. A case report

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Introduction: Conversion Disorders are characterized by neurological symptoms that cannot be explained by any known medical or neurological pathology after an adequate study. Symptoms are usually bizarre and complex. Its etiology is related to stressful experiences. The identification of conversion disorders in child and adolescent population is even more difficult than in adults due to its lower incidence and the lack of specific diagnostic criteria.

Objective: A high complex conversion case seen in our Child and Adolescent Psychiatry Department is presented. A systematic review of the existing literature about conversion disorder in this population is carried out.

Case description: M. is a 9 year-old boy who had personal antecedents of gen MTHFR C667T heterozygous mutation, histidinemia, nephrectomy, Streptococcus tonsillopharyngitis, ischaemic stroke with total recovery and confusional migraine. His

parents were divorced a few months after his birth. They maintain a troubled relationship. M. presents episodes of agitation, aphasia, feeling of strangeness, amaurosis and partial disconnection. These symptoms motivates several hospitalizations, visits to the emergency room and medical studies. Despite of that, no medical or neurological pathology is identified. Finally, diagnosis of conversion disorder is given. The patient receives treatment with Sertraline and Risperidone and a complex psychotherapeutic intervention. Progressively the problematic relationship of his parents has less influence in the child and a partial improvement of the symptoms is reached.

Commentaries and Conclusions: Publications about conversion disorders are mainly referred to adult population. Regarding to child and adolescent patients most of the medical literature are case reports or short cases series. Early publications were conceived from the Hysteria concept while the recent ones try to establish epidemiological rates to measure the disorder in child and adolescent population. In that sense, it would be advisable to develop new studies in early stages of life to clarify the incidence and etiology and to define specific diagnostic criteria. Therapeutic guides are required and would help to limit the iatrogenic risk in these patients.

PS-032

Correlation between stereotype, creativity and cognitive flexibility in children with autistic spectrum disorder

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Background: Autistic Spectrum Disorder (ASD) is a wide range of different symptomatology from mild to severe.

Difficulties with cognitive flexibility are consistent with the clinical phenomenon of repetitiveness and rigidity that characterizes autism.

Several research groups have taken the concept of repetitive behavior variety as an important step further by exploring whether the various discrete forms of repetitive behavior can be reliable and validly grouped into a discrete subgroup.

This study considered that there are many variations of interindividual symptoms such as stereotype, rigidity and creativity which could be correlated between them.

Aim: To study the correlation between stereotype, cognitive flexibility and creativity in children with Autistic Spectrum Disorder.

Methods: ASD was diagnosed according to DSM-IV criteria and confirmed with ADOS (Autism Diagnostic Observational Schedule) and ADI-R (Autism Diagnostic Interview Revised).

Children were evaluated with different neuropsychological test to measure these parameters. Cognitive function was measured by Wisconsin Card Sorting Test (WCST) and ENFEN (Neuropsychological Evaluation of Executive Function in Child); creativity with CREA (a cognitive measure of Creativity) and the theory of mind impairments with Reading the mind in the Eyes Task of Baron-Cohen.

Results: A total of 64 patients were included. Not all these test could be passed to all the patients due to these test criteria.

CREA and ENFEN (F1 and F2) had a negative correlation with ADOS-D (repetitive behavior domain) ($\rho = -0.306, p < 0.05$; $\rho = -0.467, p < 0.01$ and $\rho = -0.328, p < 0.05$). Both had correlation with the age ($\rho = 0.387, p < 0.05$; $\rho = 0.466, p < 0.05$ and $\rho = 0.453, p < 0.05$). The age was correlated also with completed categories of WCST ($\rho = 0.276, p < 0.05$).

ADOS-D (repetitive behavior domain) had a positive correlation with reciprocal social interaction's subdomains (ADI-R-A) ($\rho = 0.251$, $p < 0.05$) and circumscribed interest ($\rho = 0.301$, $p < 0.05$).

CREA was correlated with ENFEN (F1, F2, S1 and I) ($\rho = 0.636$, $p < 0.01$; $\rho = 0.587$, $p < 0.01$; $\rho = 0.397$, $p < 0.05$ and $\rho = 0.596$, $p < 0.01$) and eye test ($\rho = 0.496$, $p < 0.01$).

Discussion: Our data illustrated the potential link between creativity and cognitive flexibility and the inverse relationship of both with repetitive behavior (stereotypes and circumscribed interest). The theory of mind has also a direct impact with creativity. Age takes an important place, over the years our ASD children had more creativity and cognitive flexibility and less stereotypes.

Understanding of the phenomenology and clinical expression of repetitive behaviors in autism could be helpful to develop behavioral, developmental and pharmacologic forms of intervention for specific repetitive behavior.

Keywords: Autistic spectrum disorder, Stereotype, Creativity, Cognitive flexibility.

PS-033

Crisis of motivation in adolescence

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During several years authors worked in special school for children who cannot study in ordinary conditions owing to deviant behavior. In 95 % this pupils we revealed some psychopathological disorders as manifestations of CNS residual lesion (25 %), schizotypal diathesis (15 %), personal disorders including pathological pubertal crisis (42 %), depresses (6 %), neurotic reactions (2 %), bipolar disorder (2 %), borderline mental retardation (3 %). However in 5 % we cannot find psychopathological symptomatic. Nevertheless this children lose motivation to positive socialization (the last we determine as “process and result of individual socialization determinant such position in microsocal medium, which gives him the possibility of development and maximal full realization of natural cognitive, creative and spiritual inclinations with interiorization of social-cultural values of society in conditions of personal protection”) especially to cognitive activity, to study which is the basic activity in that age. In most adverse cases adolescent refuse school completely, go to asocial group, join to psycho-active drugs, and that sort of thing. Psychological and psychiatric diagnostic don't reveal some evident deviations. This child have partial criticism to own dissociality and don't find motives for it except loss of interest to that was sooner attractive or realized as self-evident. As the hypothesis we put forward the assumption of special character of adolescent crisis with the sharply expressed fractional insufficiency of motivation. The reasons of this phenomenon can consist in the following: at the child owing to not formation of self-consciousness and owing to natural personal dependence on the next (parental, first of all) environments the social motivation considerably is defined by influence of this environment, is in fact induced (extrinsive by Heinz Heckhausen). In the course of pubertal formation of the personality with all its features (opposition, emancipation etc.) there is more or less expressed rejection of the parental induced social motivation (that is normal) and replacement its own (intrinsive by Heinz Heckhausen), formed of social representations and needs of the teenager. In case of “fractional” infanility while the induced motivation is rejected, and own it isn't

created yet, there is an insufficiency, “crisis” of motivation that deprives of the teenager, first of all, of that necessary impulse to activity which and in norm is the most energetically expensive process. This hypothesis demands experimental check, but it allows to plan ways for research and correction of the process having destructive effect on social life of the teenager and constituting distinct danger to society.

PS-034

Deficit in reflective function mediates the impairment associated to social anxiety

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Background: Given the importance of social relationships in the adolescence, social anxiety (SA) is associated to impairment because it makes difficult social interaction and peers support. However, the avoidance of social interaction makes also difficult the development of Reflective Function (RF), the capacity to understand own and others' behaviour in terms of mental states (feelings, intentions, desires). Growing evidence suggests that deficit in RF predisposes to psychopathology, so we hypothesized to what extent RF may mediate or modulate the impairment associated to SA. Objective: This study aims to test to what extent: (1) SA is indeed associated to a deficit in RF, and (2) RF mediates the relationship between SA and impairment. Method: A sample of 464 adolescents aged 12–19 years old were assessed on measures of SA, RF, explicit and implicit self-esteem (SE), self and others' schemas, social status, somatic complaints, neuroticism, borderline symptoms, and internalizing psychopathology (depression and anxiety). Results: As expected, SA is positively and moderately associated to deficit in RF ($r = 0.52$), as well as to all measures of impairment (r compressed between 0.2 and 0.6). Moreover, RF mediates the relationship between SA and neuroticism, impaired explicit self-esteem, negative self-schema, borderline symptoms and somatic complaints. In addition, RF interacts with SA to explain depression, other's negative schema and damaged insecure self-esteem (i.e., discrepancy between explicit and implicit SE).

Conclusion: As predicted, RF plays a role in the impairment associated to SA in the adolescence. Intervention and prevention programs should pay attention to this important capacity. These results may suggest that the Mentalization-Based Treatment (MBT) designed for borderline personality disorder may be adapted and tested in treatment of SA (274 words).

Keywords: Reflective Function (RF), Social Anxiety (SA), Impairment, Adolescents.

PS-035

Delay in the diagnosis of Rokitansky syndrome due to an early onset anorexia nervosa. Case report and review of the literature

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Background: Mayer-Rokitansky-Küster-Hauser Syndrome (MRKHS) also called uterovaginal atresia is a congenital disorder diagnosed in mild adolescence due to primary amenorrhea which occurs in approximately 1 in 5000 female births. Amenorrhea is commonly seen in Anorexia Nervosa (AN), a serious multifactorial illness also diagnosed in adolescence. Resumption of menses (ROM) is one of the indicators of recovery in AN. Reduction of psychopathology and stress, estradiol levels >30 pg/ml and achieving a body mass index (BMI) between 15th and 39th percentiles are predictive of ROM in eating disorders.

Methods: A 17-year-old female diagnosed of AN since 13, and left renal agenesis since 8, who required multiple psychiatric hospitalizations until the last year, was evaluated by the Gynaecology clinic from our Eating Disorders Unit to study her persistent primary amenorrhea. She had been reached and maintained a target weight (BMI >18 kg/m²), during more than 6 months.

Results: The gynaecological examination revealed normal secondary sexual characteristics and external genitalia (Tanner 4). MRI showed one single hypertrophied right kidney, the right adrenal gland, and right ovary, but absence of left ovary, uterus and 2/3 of proximal vagina. Her karyotype was female, 46 XX. Laboratory findings showed normal gonadotropin levels [LH], 2.8U/L [FSH], 4.7U/L and estradiol >30 pg/ml. The patient was diagnosed of MRKHS and restrictive AN. The response to diagnose included confusion and shock when she noticed her inability to carry a pregnancy, but also her anxiety due to amenorrhea was lower when she knew the etiology, and improved her anorectic cognitive disturbances. She is still visited by a multidisciplinary team to manage psychological aspects of the two conditions as well as medical, anatomical and surgical treatments.

Conclusions: Patients with premenarchal onset of AN are at risk of persistent amenorrhea despite of weight restoration. Nevertheless, it is necessary to explore more causes apart from hypothalamic etiologies. MRKHS is the second most frequent cause of primary amenorrhea after gonadal dysgenesis. Besides, in about 30–40 % is found urinary tract congenital anomalies such as unilateral renal agenesis. Female patients with those anomalies and specially in the context of an eating disorder should be evaluated by a gynaecologist if within 3–6 months of reaching a BMI between 25th percentile still persist in amenorrhea. Our review supports the position that psychological issues as well as medical aspects must be addressed to provide optimal care.

PS-036

Demand analysis in child psychiatric liaison program in a general hospital

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Objective: Describe the characteristics of a sample of patients who were referred from paediatric specialists for a psychiatric assessment in a psychiatric liaison program.

Materials and methods: We made a descriptive study collecting data from 79 patients who were cited and evaluated along 2013 and 2014 in a child psychiatric liaison program in Hospital Clínico San Carlos de Madrid, referred from other specialties. As a liaison psychiatry program inside a General Hospital, appointment availability of new patients from primary care is limited to half of the total. Analyzed variables are age, sex, service of provenance, reason for referral and diagnosis after the psychiatric assessment.

Results: The average age of patients who were attended at the first appointment was 10.25 years. 59.5 % were male and 40.5 % were female. 28 patients (35 %) were derived by pediatric Neurology, 12

(15 %) by Pediatric Gastroenterology, 11 (13.9 %) by pediatric endocrinology, 23 (29.11 %) by pediatric primary care and the remaining 6, 3 % by other specialists. The most frequent reasons for refer all were behavioral disorders (22.8 %), ADHD or suspected ADHD (19 %) and abdominal pain (11.4 %). The most frequent diagnoses after the first psychiatry assessment were ADHD (15.2 %), Adjustment Disorder (7.6 %) and anxiety disorder (6.3 %). 16.5 % of patients did not have any psychiatric diagnosis.

Conclusions: Pediatric neurology is the speciality that most patients has referred for a psychiatric assessment in this Psychiatric Unit. The Detection of psychiatric symptoms by different pediatric specialists and the referral to a child psychiatry liaison program allows a multidisciplinary assessment and therapeutic approach and a complete medical attention for children and adolescents.

PS-037

Depression, suicidal behavior and bullying: a study about 120 tunisian adolescent

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Objective: To determine the prevalence of bullying among a sample of Tunisian Adolescent and the correlation between bullying, depression and suicidal behaviors.

Methodology: A self-report survey was completed by 120 adolescent attending 12TH degrees in two school of the city of Sousse-Tunisia in the period between November and December 2014. The self report contains a questionnaire about health record and family status, the Adolescent Peer Relations Instrument, the Beck depression inventory and the suicidal behavior questionnaire.

Results: the mean age was 16 year-old (from 15 to 18) and the sex ratio was 1. The score of the section A (bully other) in the adolescent peer relations instrument was less than 18 in 5 %, between 19 and 30 in 34 % between 31 and 40 in 33 % and more than 41 in 22 %. The score of the section B (victim of bully) in the adolescent peer relations instrument was less than 18 in 0 %, between 19 and 30 in 50 % between 31 and 40 in 33 % and more than 41 in 22 %. There was a correlation between bully other and being bullied.

The ANOVAs test showed a significant correlation between bully other and depression ($p < 0.001$) but there was no correlation between bully other and suicidal behaviors ($p = 0.107$). In the other hand, there was a significant correlation between being victim of bully and suicidal behavior ($p = 0.002$) but there was no correlation between being victim and depression ($p = 0.448$).

Conclusion: The rate of bullying among our adolescent is extremely elevated with an important prevalence of depression and suicidal behaviors. An intervention of the various actors in the youth's mental health should be undertaken, urgently.

Keywords: Depression, Bully, Suicidal behaviors.

PS-038

Differences between avoidant/restrictive food intake disorder and anorexia nervosa: two cases report

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Background: Avoidant/restrictive food intake disorder (ARFID) is a new diagnosis in DSM-5. The patients with ARFID do not have body

image distortion and this is the most important difference with anorexia nervosa (AN).

Objective: To compare symptoms of two patients, one with ARFID and the other one with AN.

Method: A review of clinical characteristics of ARFID and AN in the literature and a description of two cases admitted to a day treatment program for eating disorders.

Results: Patients with ARFID may present restrictive eating, but it is clearly different from AN in that there are no disturbed cognitions about weight. Patients with ARFID have an earlier onset, a longer duration of illness, a higher likelihood of being male, a significantly higher comorbidity of learning disorders and more social problems than those with AN. Patients with ARFID and AN have similar degrees of malnutrition but those with ARFID should only be diagnosed when the restrictive avoidant eating is a cause of inadequate nutrition that may be associated with delayed growth in children. AN patients are more likely to lose a greater percentage of their premorbid body weight and required more hospital admission as a result of physical dysfunctions (for example heart rates were lower in AN) than those with ARFID. The first case was a 13-year-old boy who had never been interested in food since childhood. Since he was 6 years old had a delayed growth due to the restrictive and selective eating. When he was admitted to a day treatment program his body mass index was 13.5 kg/m² (<1st percentile). He did not have body distortion. He had learning and social problems. The second case was a 10-year-old girl with AN diagnosis. She started food restriction three month ago and lost five kilograms which corresponds to a body mass index 15 kg/m² (15th percentile). When she was admitted to a day treatment program her heart rates were 60 bpm. She had a body image distortion and fear to gain weight.

Discussion: These cases are representative examples of the clinical characteristics of ARFID and AN. The patient with the ARFID diagnosis was a male, had comorbidity, a delayed growth and a longer duration of illness compared to the patient with AN diagnosis. And the patient with AN diagnosis had body image distortion and her heart rates were lower compared to the patient with ARFID.

PS-039

Do you feel it? Sensorial perception in the Asperger syndrome

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Introduction: The origin of autism is still unknown. In the last 70 years it have been postulated many theories about it real origin.

Objectives: The aim of this study is to expose, with a description of a clinical case, the theory whose talks about a different sensory perception in autism.

Methodology: 14 year old boy with Asperger's Syndrome which is an inpatient at the Childhood and Adolescent Hospitalization Unit in Ciudad Real General Hospital. The patient was referred to our unit with the diagnosis of disruptive behavior and Asperger Syndrome. These behaviors consist of unexpected tantrums and aggressive behavior in response to certain sounds or changes in his routines. Minimal changes in the environment generate irritability. When the child perceived physical pressure or intensive contact like hugs, tackles, etc. he presented behaviors like a tantrum or physical aggression. Decontrol hyperkinesia and motor tics appeared in crowded places. Sometime he removed his clothes and shoes as if

they hurt him. Sometimes small frictions seem to cause great pain and, on the other hand, he hit his head against the wall without changing the gesture. He presents difficulties in the relation with peers.

Results: Some authors spoke about the existence in people with Autism Spectrum Disorders (ASD) different sensory experiences and from this experiences, this children presents different adaptive responses. It is believed that these sensory disturbances would be present in 90 % of individuals with ASD, the most prevalent: acoustic, visual and tactile hypersensitivity and algid hypo responsiveness.

Conclusions: The possibility of a different sensorial perception in children with an Asperger Syndrome explains some of the behaviors that they present and they are classified as dysfunctional behaviors. Know the origin help to understand and accept this disruptive behaviors and search adequate resources foot these patients.

PS-040

Does exist vulnerability of nigrostrial system to neuroleptics in children with intellectual disability

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Some atypical antipsychotics as Risperidon produce a variety of acute, temporary neurological disorders referred to as extrapyramidal symptoms (EPS) in the great majority of patients.

Mentally retarded (mild and moderate) children are predisposed to stereotypies and other abnormal involuntary movements, even without drugs. This could indicate that in these children exist vulnerability of nigrostrial system. Neuroleptic are used in substantial numbers of mentally retarded children and youth (in cases of dual diagnoses) but often with the sole purpose of suppressing undesirable behavior.

Objectives: The evaluate whether or not Risperidon induced EPS in mild and moderate mentally retarded children often then in children without intellectual disability i.e. is exist hypersensitivity of nigrostrial system to neuroleptics in children with intellectual disability.

Subjects: 20 Children, aged 12–16 years, mild and moderate mentally retarded with diagnosis of other schizophrenia spectrum, other psychotic disorder (dual diagnosis);

Control group: 21 children aged 12–16 years, without intellectual disability with diagnosis of shizophrenia, other schizophrenia spectrum, other psychotic disorder .

Methods: The diagnosis were made in accordance with DSM V criteria. Assessment of intellectual functioning was performed using Wechsler Intelligence Scale. All patients underwent a pediatric check up and laboratory. Neurological check up was conducted for all patients at the time of diagnosis, at the time of starting and during the therapy (Barnes Akathisia Scale, Simpson-Angus Scale/SARS, Abnormal Involuntary Movement scale (AIMS). Patients were treated with risperidone tbl. Initially 0.25 mg/day; based on the assessment of threatening psychiatrist this dose was increased by 0.25 or 0.50 mg; maximum dose 2.50 mg/day. Assessment of severity of symptoms was measured before starting and after 8 weeks of therapy. In all patients was follow up of appearance of extrapyramidal symptoms. All results were statistically analyzed.

Results: In most patients of both group there was a decrease in the intensity of psychotic symptoms. During the 8-week the most common AEs on the Side Effects Review, scored as moderate or higher,

were as follows Extrapryamidal symptoms, as assessed by the SARS, were more common in group of mild and moderate mentally retarded children with dual diagnosis.

Conclusion: In our study extrapyramidal symptoms, was more common in group of mild and moderate mentally retarded children with dual diagnosis than in patients without intellectual disability with diagnosis of schizophrenia, other schizophrenia spectrum, other psychotic disorder.

PS-041

Does it vary emotional expression of patients diagnosed ADHD and treated with methylphenidate?

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Introduction: Although investigation have demonstrated that stimulants are effective medication for the treatment of the symptoms on the ADHD, a commonly described but quite slightly studied side effect of this type of medication, is the effect on the emotional expression of patients.

Objectives: evaluate the effect of the treatment with Methylphenidate on the affective/emotional expression in children diagnosed with ADHD.

Methods: It's a descriptive study of several cases series, from a center and about a unique group, where "n" will be 15 children diagnosed with ADHD at the University Hospital, who were required beginning treatment with methylphenidate, with a daily dose of at least 0.3 mg/Kg. In this study it will be evaluated the emotional expression of the group, according to the scale Expression and Emotion Scale for Children (EESC) making a comparison between the previous moment to the treatment and a subsequent month from its beginning.

Results: The evaluation of the total result of the EESC conducted by the parent didn't show statistically significant differences between scores previously of the treatment and results after a month with it. The dominions (positive emotions, emotional flatness and emotional lability) didn't show differences between both periods of time, nevertheless, the positive emotions showed a tendency of reduction more showy than the rest, without getting to be statistically significant ($p = 0.0638$).

Conclusion: Statistically there haven't been significant changes in the emotional expression of the children caused by the treatment with methylphenidate. Nevertheless, the data show that there is a tendency to an improvement in it.

PS-042

Does oxytocin receptor gene polymorphism play a role in the social functioning of children with attention-deficit/hyperactivity disorder

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Objective: A deficiency in social functioning in selected children diagnosed with Attention-Deficit/Hyperactivity Disorder (ADHD) was found to be similar to that in children with Autism Spectrum Disorders (ASDs). In studies of the aetiology and treatment of ASDs, it is reported that the oxytocin system has an impact on social functioning. In this study, ADHD and control groups were compared according to the polymorphism of three oxytocin receptor (OXTR) genes (rs53576, rs13316193, and rs2268493) and the relationship between the polymorphisms and social functions were examined.

Method: A total of 198 children who were studying in the same primary school were matched in terms of age and gender (99 ADHD-99 control) and included in this study. In order to determine the clinical diagnosis of the children, a Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version was administered. The Social Reciprocity Scale (SRS) was applied to evaluate social functioning. Total genomic DNA was isolated from buccal mucosa samples.

Results: No significant differences were determined between the ADHD and control groups in terms of rs2268493, rs13316193, and rs53576 genotype distribution ($p = 0.078$, $p = 0.330$, and $p = 0.149$, respectively). However, it was determined that OXTR SNP rs2268493 T allele frequency in the control group was significantly higher than in the ADHD group ($p = 0.024$). Compared to the control group, the ADHD group had a higher score on the SRS scale scores (SRS total; $Z = -21.135$, $p < 0.001$). No significant difference existed in SRS scale scores between children with the T/T genotype and children with the C allele in the ADHD group (SRS total; $Z = -0.543$, $p = 0.587$).

Conclusions: In this study, the allele distribution of the OXTR gene SNP rs2268493, which is alleged to influence the aetiology of ASDs, was significantly different in the ADHD group when compared to the control group. This finding is important in understanding the underlying biological infrastructure in ADHD and for the development of new treatment modalities.

PS-043

Does reflective function moderate the association between social anxiety and somatic symptoms in the adolescence?

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Background: Somatic complaints are frequently present in Internalizing disorders in childhood and adolescence. However, it is not well established whether adolescent social anxiety (SA) is associated with physical complaints. SA leads to the avoidance of social interaction, and social interaction is instrumental for the development of Reflective Function (RF) or mentalization, i.e., the capacity to realize and understand the mental states (beliefs, motives, emotions, feelings) that underpin own and others' behavior. Given that the impairment in

RF affects the capacity to contact with, hold and “metabolize” own emotional reactions, it is expected that the distress that cannot be mentalized is more prone to lead to somatic complaints. Therefore, if RF is indeed impaired in cases of SA then it is possible that this impairment may mediate the risk of somatic complaints. Since depression is frequently present in cases of SA and it also predisposes to somatic symptoms, the role of depression should also be taken into account.

Objective: This study aims to test to what extent: (1) somatic complaints are associated with SA, (2) RF mediates the relationship between SA and somatic complaints, and (3) the degree of depression interacts with SA in the association to somatic complaints.

Method: Two hundred and fifty-four youngsters aged 12–18 years old were assessed on measures of SA (Social Anxiety Scale for Adolescents; SASA), somatic symptoms (Somatic Symptoms Questionnaire), RF (Mentalization Questionnaire; MZQ) and depression (Beck Inventory Depression Scale; BDI). Results: As expected SA was associated to somatic symptoms (β SASA = 0.27) and this association was mediated by a deficit in RF (β MZQ = 0.28). However, when depression was taken into account, depression but not SA neither RF explained the somatic complaints (β BDI = 0.38).

Conclusion: These results highlight the importance of taking into account the role of depression in the production of somatic symptoms in adolescents. Against predictions, a deficit in mentalization does not seem to increase the risk for somatic symptoms in adolescents with social anxiety.

Keywords: Reflective function, Somatic symptoms, Social anxiety, Depression, Adolescents.

PS-044

Drawing psychopathology in autistic spectrum disorder children

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Introduction: Childhood is the lifetime in which external reality mixes with internal reality. The action of drawing in children is a way to explore their personality. It is considered a projective technique in which children use the defense mechanism of projection. It is a tool to complete the psychodiagnose process, especially in children with verbal problems and difficulties with expression.

The Autistic Spectrum Disorder (ASD) children have problems to describe their own feelings and emotions in verbal and non verbal language, therefore, they can provide us a lot of information drawing their own world.

Objective: The purpose of this study was to discover the psychopathology of children with ASD through their drawings.

Methods: A selection of drawings of ASD children, ranged from 6 to 16 years old, was done. ASD was diagnosed according to DSM-IV criteria and confirmed with ADOS (Autism Diagnostic Observational Schedule) and ADI-R (Autism Diagnostic Interview Revised).

A4-sized booklets were given for each child and they had to draw an imaginary family (L. Corman), a human figure (Buck) or a free drawing.

The drawings were done by children during their attendance in group therapy in the Child and Adolescent Psychiatry Day Hospital of Valladolid (Spain).

Results: The drawings showed the psychopathology that we had observed in our patients: the social and emotional impairments was

revealed by the fact that they drew more inanimate forms; the difficulties in interpreting emotional process in the lack of facial emotional expression; interaction difficulties were shown by the fact that they did not draw so much interactive social actions in their pictures and restricted interests almost always appeared as an important element of their subjects.

Discussion: Drawing provide a safe and enjoyable means that encourage children to explore, make decisions and solve problems. Children’s drawings are indicators of emotions, self-esteem, and social competence, as well as other aspects of personality.

A projective technique as drawing could help us to discover additional information about our patients, specially children and mainly the ones who had problems with the expression of feelings like ASD children.

In most of the drawings of ASD children we could find at least one of the three criteria of ASD: social deficits, communication difficulties and restricted interests.

The act of drawing can be used to understand children’s struggles, their internal world. Moreover it could also help the children gain insight and review progress through drawing records.

Keywords: ASD, Drawings, Psychopathology.

PS-045

Early risk factors of coronary heart disease among young adults with childhood onset depression

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Introduction: There is strong evidence for a link between depression and coronary heart disease (CHD). Studies are usually made after CHD developed and measure the effect of depression on the outcome of the heart disease. The aim of our study was to see whether cardiological risk factors are present in a population of young adults who suffered from major depression with an onset before age 15. We hypothesized that risk factors such as smoking, obesity and hypertension will be more frequent in this population than in a healthy population. Individuals with childhood onset depression will exercise less and spend more time on passive activity such as watching television or using a computer.

Methods: N = 258 childhood-onset depression patients (56 % females, mean age 22.39 + 2.41 years) and N = 148 healthy controls (36 % females, mean age 19.01 + 1.52 years) were examined by self-report questionnaires. Of the COD sample 40.1 % worked, 17.1 % were unemployed and 37 % studied compared to 7.4, 4.1 and 88.5 % of the healthy controls, respectively.

Results: Health status was excellent in 27.2 %, good in 49 % and acceptable in 4.7 % of the COD sample, while the proportions were 52, 42.6 and 5.4 % in the healthy controls. Significantly more COD young adults smoked both in the past and at present. COD youngsters ate less vegetables, fruits and dairy products than healthy ones. Twice as many ever depressed young ones took medication against hypertension and significantly more had cardiological problems at that young age. They also spent more time in front of the television and had less exercise during an average day.

Summary: Risk factors of heart diseases include smoking, physical inactivity, overweight, diabetes, hypertension and unhealthy eating habits. Depression that started before the age of 15 in our sample was associated with early appearance of these traditional risk factors of later cardiological problems. It would be important to screen and educate this high risk group for coronary heart disease.

PS-046**Early-onset anorexia nervosa in an 8-year-old boy**

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Introduction: The onset of both diseases, AN (Anorexia Nervosa) and BN (Bulimia Nervosa), occurs normally during adolescence, however, some authors report AN beginning at the age of seven. They draw attention to that early onset AN can retard or even stop physical development, and the incidence in boys may be higher before puberty. Conversely, BN is scarce before adolescence. In this case report, we describe an 8-year-old boy diagnosed as AN, restricting type.

Case: M. is an 8-year-old boy and he was referred with diagnosis of anorexia nervosa, restricting type from another outpatient clinic, where his aunt had taken him 2 months ago because of his fear of gaining weight. History was completely obtained from his parents since M. refused to speak with the doctor. His fear of gaining weight began 2 years ago, and according to his parents, media played a big role in this situation. He was adversely affected by comments made about obese people on TV shows. After that, he began to eat less and weigh himself whenever a weighing scale is available. When he saw even a little increase in his weight, he restricted his diet. After meals, he used to look at himself in the mirror and almost always pointed out he had a huge belly. About a year ago, when his mother started to insist him on eating more and finishing a full plate, even he ate obediently, he began to vomit as soon as he finished his meal. After first psychiatric evaluation, in which he was diagnosed as AN, he was sent to a pediatrician for physical examination. His height and weight were respectively at the 3rd percentile, and below the 10th percentile.

Discussion: The high risk group for AN is usually described as 15–19 year old girls, however epidemiological studies suggest that the age of onset of AN decreases, and the incidence in boys may be higher before puberty. Lack of awareness, that AN also can occur in young children and boys, can lead to delay in referral, diagnosis and treatment. This case is a striking example to this argument since M. was diagnosed two years after the beginning of the clinical representation.

PS-047**Eating disorders and dual pathology**

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Introduction: Eating disorders relate to more and more with problematic addictive risk behaviour. This interaction is more evident in Binge Eating Disorder where dysphoria can pay binge episodes with food. Bulimia Nervosa is characterized by loss of the feeding control behaviour and Anorexia Nervosa has on their clinical explanation addictive and fixed ideas of weight, food and general physical activity control.

Method: Among the patients with Feeding and Eating Disorder attending group therapy, a patient of 14-years-old affected of Anorexia Nervosa is described. Is also described an adolescent with Bulimia nervosa, co-morbidity of Internet addiction and a personality style with risk of becoming borderline when adult. After, we depict a 12-year-old girl suffering from Binge Eating Disorder that was solved to treat her ADHD's base. Finally, we study the psychotherapeutic methods used in a 15-years-old boy with obesity and addictive behaviour to video-games.

Results: Solidarity, empathy and self-esteem protection and prevention was improved with therapy groups in all the 4 cases of Feeding and Eating Disorder. Protective factors such enhancing parents and to be clear about their own goals may be related to decreased risk of addiction. Anorexia Nervosa could be cured through their parents regained control over her global behaviours and in that order was the psychotherapy. In the other three cases, the presence of co-morbidity spoke about real addictive risk.

Discussion: Addiction protective factors, individual psychotherapy, group therapy and family therapy similar to that used in Substance Use Disorders has been used in all the 4 cases showed here. Results have been able to better restoring by full on three of the 4 cases and pointing out a continuing psychotherapeutic treatment with progressively better results in the last fourth patient.

Conclusion: The psycho-prophylactic conclusions are that given the difficulty to predict the posterior evolution of problematic behaviours, is essential to reduce future risk of their psychopathological consolidation in terms of addiction. The Feeding and Eating Disorders therapy beneficiaries can be well evolutionarily if psychotherapy point to their relationship with problematic behaviours of addictive risk.

Keywords: Addictive behaviours, Binge Eating Disorder.

References

1. Shaw H et al (2009) "Preventing eating disorders". *Child Adolesc Psychiatr Clin N Am* 18(1): 199–207.
2. Lazaro L et al (2010) "Effectiveness of self-esteem and social skills group therapy in adolescent eating disorder patients". *Eur Eating Disord Rev* (27).

PS-048**Eating disorders in male adolescents: a case presentation of anorexia nervosa**

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The prevalence of Eating Disorders (EDs) in men is lower than in women (1:10). However, it is remarkable that there has been an increase in the number of cases in male adolescents. Anorexia nervosa (restricting type/binge eating or purging type with bingeing and/or purging) is found amongst adolescents between 1–3 % and bulimia nervosa (purging type/non-purging type) between 0, 6–13 % and they both entail eating behaviour alterations which affect the health of those who suffer from these disorders.

The psychopathology, the age of onset by 14 years old, the pre-morbid characteristics, the psychiatric comorbidity, and parental and mass media influence can be similar for both sexes while environmental and socio-cultural factors are distinct from birth. Men and women perceive body volume differently; they do not share the same values with regard to body shape and figure and they judge thinness in a different manner. EDs are always associated to female pathology, which hampers the recognition of the eating disorder in men and the help-seeking behaviour is delayed due to the fact that they feel stigmatized. Risk factors for EDs such as premorbid obesity, sports participation, sexual orientation conflicts, and social influence towards the assumption that men must have a sculptural body are some aspects to be taken into consideration when monitoring this group of the population.

The aim is to present the report of a male adolescent that was diagnosed with anorexia nervosa of the restrictive and selective type

of the food and to know the therapeutic and multimodal approach conducted by professionals of an Eating Disorder Unit.

PS-049

Effectiveness of a partial hospitalization treatment program for adolescents with eating disorders

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Introduction: The likely increase in the incidence of Eating Disorders (ED) in children and adolescents, together with the chronic course of the disease and the reduced availability of hospital beds, require the reorganization of resources to comprehensively treat patients with ED. This study describes and assesses the effectiveness of an ED-Transition Program Group (ED-TPG), which is an intensive outpatient treatment for ED patients at risk of chronicity carried out within the Partial Hospitalization Unit (PH) of a pediatric general hospital.

Objective: To assess the effectiveness of ED-TPG at discharge and at 12 month follow-ups for adolescent patients with ED and a torpid course of the disease. A second objective was to compare psychopathological variables among ED patients that evolved favorably in the ED-TPG and patients requiring intensity increase treatment in PH. **Method:** Forty-nine patients with ED 13–17 years (Mean 15.5, SD 1.36) were evaluated with the Eating Disorder Inventory (EDI-2), the Beck Depression Inventory (BDI), State-Trait Anxiety Inventory (STAI), the Body Attitudes Test (BAT), Child and Adolescent Perfectionism Scale (CAPS) and Anorexia Nervosa Stage of the Change Questionnaire (ANSOCQ). Demographic and clinical variables were also recorded.

Results: 36 (73.5 %) patients completed the ED-TPG and were discharged to an outpatient setting and 13 (26.5 %) patients needed to increase the intensity of treatment (partial or total hospitalization). ED patients below the normal minimum weight increased significantly the Body Mass Index (BMI) (17.56 vs. 18.22 kg/m²; $p < 0.001$) and maintained it at 12 month follow-ups (Mean: 18.95 kg/m²; SD: 1.1). At 12 month follow-ups, 10 (90.9 %) patients stopped binge eating, 10 (90 %) ceased purging behavior and 31 (88.6 %) recovered menstruation. No significant differences were found in any of the evaluated variables, except that an older age was associated with a favorable outcome in the ED-TPG (16 vs. 14 years; $p = 0.004$).

Conclusions: The ED-TPG is an effective treatment for adolescents with ED and risk of chronicity. The ED-TPG has a significant impact on weight recovery, elimination of binge eating and purging behavior in adolescent patients with ED. The improvements obtained at discharge were maintained after 12 months of stopping treatment. Older age is the only variable that is associated with a good response to treatment in ED-TPG.

PS-050

Efficacy of early intervention in autism: 10 h a week of ESDM

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Background: In the last decades early intervention has become highly recommended in Autism spectrum disorders (ASD). Early

Start Denver Model (ESDM) is an early one-to-one intervention model that integrates behavioral, developmental and relational approaches with the aim to promote the overall development of young children with autism. This is also one of the models that showed the most promising results in the treatment of this syndrome: for instance, previous literature demonstrates significant progress of these children in IQ, adaptive behaviour and autism diagnosis after 2 years of early and intensive ESDM intervention. Nevertheless no display of efficacy of this model has been yet reported in France. In the current report, we present outcomes of three children with diagnosis of autism spectrum disorder, after 1 year of one-to-one ESDM intervention in a public hospital in Lyon, France.

Method: The three children (mean age 2 years 10 m at the beginning of the intervention) received 10 h a week of one-to-one ESDM intervention during a period of 36 weeks. The three children were tested on adaptive behaviour and developmental abilities before starting the intervention and at the end of the intervention. To this aim Mullen Scale of Early learning (MSEL) was administered and parents were interviewed by means of Vineland adaptive behaviour scale (VABS). Tests' standard scores and psychological observation were used as measures of the outcomes.

Results: Compared to their baseline the three children showed a global improvement in their IQ in all domains of their development. MSEL scores demonstrate a gain concerning in particular subscale of visual reception and receptive language. VABS scores stayed stable over time, although little improvement emerged especially concerning subscale of daily living skills.

Conclusions: Our report confirms the importance of early intervention in ASD. In particular it suggests that ESDM may be efficiently implemented in European countries and that 10 h a week may also provide promising outcomes.

Keywords: Autism, Early Start Denver Model, behavioural and developmental intervention.

PS-051

Emotional regulation to frustration and behavioral problems in Chilean preschool children: a pilot study with four measures of frustration

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This study aimed to analyze the functioning of various (four) measures of frustration with a sample of nine Chilean preschool children, considering the cultural specificity of this population. Five children with behavioral problems and four without behavioral problems, and their primary caregiver, took part of four observational measures: “denied game” in two modalities, “denied candy” and “disappointing gift”. The measures were coded according to the method of Stansbury & Sigman (2000), which assesses four emotional regulation strategies in preschool: search for comfort, instrumental, refocusing attention and cognitive reappraisal. Preschoolers are expected to occur more frequently strategies refocusing of attention and cognitive reassessment, so that children with behavioral problems would show a deficit of them and increased use of instrumental strategies.

Descriptive analysis of data revealed that children with behavioral problems mainly used instrumental and refocusing attention strategies. Children without behavioral problems also used refocusing attention strategies more frequently, however they also used cognitive re-evaluation strategies, yet in lesser extent. In none situation children used searching for comfort strategies.

Although differences between the two groups of children were observed, the measures of frustration did not provide information about the magnitude of behaviors among children with difficulties. Hence, we estimate it is essential to keep the parents' report in the measure of emotional regulation.

Regarding each measure of frustration, the “disappointing gift” induced higher levels of frustration than the rest of situations, and was associated with the delivery of gender-related objects. The “denied game” was influenced by children's motivation and was also linked with gender differences (measures with gender-neutral games were less motivating than those with gender-related games, such as cars or dolls). The “denied candy” did not generate a major impact on children. Most of them did not pay attention to the sweet because they were concentrated in the game.

It can be concluded that disappointing gift and denied game are relevant to the study of this population, however, consistent with other authors, the observational evidence must be complemented by other measures, such as reporting parent or teachers.

Keywords: Emotional regulation, Frustration, Measure of emotion regulation, Behavioral problems, Preschool.

PS-052

Empathy maturing in children with mental retardation

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The emotional well-being of a person depends of the level of social competence. Empathy can be considered as a precondition for developing this ability. Therefore it is important to study mechanisms and factors influencing on empathy maturing of children with mental retardation.

The aim of this research was studying the features of the process of empathy in children with mental retardation per se, as well as studying the relationship between child-parent relations and maturing of empathy.

The research included the following methods:

1. Neuropsychological diagnosis;
2. The experimental method (presentation of emotionally charged videos);
3. Lüscher Color Test test;
4. Self-assessment of child's emotional response;
5. Drawing of a family;
6. PARI- technique of E. Schäfer, and R.Bell in T.V.Netscheret's adaptation;
7. Statistical analysis included U-Mann-Whitney test, t-Student test and Spearman correlation analysis.

The experimental group consisted of 20 children of 6–7 years old with mental retardation (15 boys and 5 girls) and their parents. The control group included 23 children (15 girls and 8 boys) of the same age with normal development and their parents. The study has showed that the children of the experimental group were less emotionally responsive than their normally developing peers. Child-parent relations in the control group were more satisfactory than in the experimental group. The positive correlation between favorable child-parent relations and the ability of the child to the emotional response has been observed in the control group, but not in the experimental group. These conclusions can put into the focus while working-out an intervention course for empathy developing for children with mental retardation.

PS-053

Evaluación de la personalidad y sintomatología asociada en pacientes con trastorno de conducta

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La sintomatología ansioso-depresiva se asocia estrechamente con los trastornos externalizantes. De hecho existe una amplia evidencia científica que sugiere una amplia comorbilidad entre ambos trastornos. Uno de los mayores exponentes de los trastornos externalizantes son los Trastornos de Conducta, los cuales se relacionan con rasgos de personalidad antisocial. Por todo ello, la presente investigación ha consistido en evaluar las variables de personalidad, la sintomatología ansioso-depresiva, el locus de control y la impulsividad en un grupo de pacientes diagnosticados de Trastorno de Conducta (Trastorno Negativista-Desafiante, Trastorno Disocial y Trastorno de la Conducta No especificado) ingresados en régimen de Hospitalización completa en ITA (Unidad de Trastornos de Conducta). Para evaluar la sintomatología ansioso depresiva empleó el STAI (Rasgo y Estado) y el BDI-II. En cuanto a la evaluación de la personalidad se empleó el MACI; También se emplearon la Escala de Impulsividad de Barrat y una escala de Locus de control. Los resultados muestran las características de personalidad de los pacientes diagnosticados con algún tipo de Trastorno de Conducta, así como su relación con la sintomatología asociada, la impulsividad y el locus de control.

Palabras clave: TRASTORNO DE CONDUCTA, PERSONALIDAD, ANSIEDAD, DEPRESIÓN, IMPULSIVIDAD, LOCUS DE CONTROL.

PS-054

Executive functions association with phenylalanine blood level in children with Phenylketonuria (PKU)

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Objectives: PKU is a metabolic disorder which is associated with intellectual disabilities. The negative consequences of phenylalanine blood level on brain development have been demonstrated. However the effect on executive functions is not yet known thus in this study we evaluated the correlation between executive functions and phenylalanine blood level in these children.

Method: In a case control study, a total number of 50 children at ages 6-16 who had three documented serum phenylalanine in their medical records enrolled the study. Patients with severe mental retardation, mood and psychotic disorders and who had a history of head trauma were excluded from the study. Demographic characteristics were recorded and the IQ level was determined using Raven Progressive Matrices. Executive functions including Behavioral Regulation Index, Metacognition Index and Global Executive Index were assessed by BRIEF rating scales. Statistical analysis was performed using parametric and nonparametric statistical methods including Chi square, ANOVA and regression analysis using SPSS-11 statistical software.

Results: Among participants 54 % were male and 46 % were female. The mean age of participants was 11.6 ± 3.7 . The mean of IQ score was 61.2 ± 16 and the mean serum level of phenylalanine was 10.3 ± 2.9 mg/dl. There was a negative correlation between IQ score and

mean phenylalanine blood level. There was a significant difference in executive functions mean scores in patients with normal and abnormal Phenylalanine serum level.

Conclusion: Phenylalanine serum level may affect the executive function abilities and the IQ level in children with PKU and is an important protective factor for prevention of intellectual deficits.

PS-055

Exploring temperament profile of 3 to 10 years old Belgian children referred for autism diagnosis

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Temperament study has recently received a growing interest in the field of autism research. So far, studies have highlighted its impact on symptoms expression in autistic patients, from adulthood to early childhood, especially for maladaptive and challenging behaviours. Some researchers also claimed that specific temperament features were predictive of the evolution to autism in young high-risk children, and could be part of the very early symptoms. As temperament is a developmental construct that crosses diagnostic categories, it has also been involved in comorbidities between autism and ADHD. These results have then raised new questions, concerning the influence of chronological and developmental age on the temperament profile in children with autism, the cross diagnostic aspect of temperament profile and the influence of temperament profile on symptom intensity.

In order to address these issues in a clinical population, we proposed to investigate temperament profile in young children referred for autism diagnosis in Brussel's Saint-Luc university clinic specialised centre for autism. We have interviewed the parents of 40 children from 3 to 10 years old with Rothbart's well-known Child Behavior Questionnaire very short form. Diagnosis was assessed through ADOS-1 and ADI-R and a multidisciplinary team evaluation referring to DSM-5 criteria. IQ was assessed by specialised psychologist with French age appropriate tools, and comorbidities were investigated through an extensive interview by experienced clinicians. Symptoms intensity was assessed with the revised version of the Infant Behavioral Summarized Evaluation. The Child Behavior Questionnaire very short form delivers scores for three temperament dimensions: Negative Affects, Effortful Control and Surgency. We aimed to compare temperament profiles concerning these three dimensions between the group of children that has received the autism diagnosis and the group of children that failed to match autism criteria. We are also interested in the influence of chronological and developmental age on this profile, and its link with symptoms intensity.

PS-056

Factors associated with accidental injuries in children with ADHD

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Background: Young people with ADHD-CT have been found to be at greater risk of being involved in accidents, including physical injury. It is not clear whether this is associated with core ADHD-CT symptoms of hyperactivity and inattention, motor impairment, or other developmental comorbidities

Aims: To profile clinical factors associated with accidental injuries in children with ADHD.

Method: Participants were 32 male children with a DSM-IV-TR diagnosis of ADHD-CT, and 23 Typically developing male children, aged 7 to 12 years with a FSIQ of 80 or above [Mean (SD): FSIQ, TD = 107.13 (9.54), ADHD-CT = 102.16 (12.26); Age, TD = 9.47 (1.41), ADHD-CT = 9.98 (1.59)]. Parents completed a customised questionnaire that asked about the occurrence and types of accidental injuries their child had in the past 12 months including bruises, cuts, sprains, broken bones, or any other injuries. Each child was given a score out of five according to the number of accidental injury types their parent reported, with five being the most injury types that could be reported. Motor proficiency was measured using the Movement ABC-2. ADHD-CT symptoms were measured using Conners Long Form, and Autism and Anxiety symptoms measured using the Developmental Behaviour Checklist. Spearman (ρ) rank correlations between accidental injuries and parent-reported measures of ADHD-CT symptoms, autism symptoms and motor problems were performed.

Results: Children with ADHD-CT had a higher number of accidental injuries compared to typically developing children Mann-Whitney $U = 482$, $p < 0.043$, ADHD-CT group Mean (SD) = 2.19 (1.15); Typically Developing group Mean (SD) = 1.12 (1.52). There was no relationship between motor proficiency (Total MABC-2) and number of accidental injuries ($\rho = -0.078$, $p = 0.675$) in children with ADHD-CT. Higher levels of parent-reported hyperactivity/impulsivity ($\rho = 0.382$, $p = 0.034$), autism symptoms ($\rho = 0.472$, $p = 0.006$) and anxiety ($\rho = 0.618$, $p < 0.001$) were associated with greater number of accidents in children with ADHD-CT.

Conclusion: Our results are consistent with previous studies that have found children with ADHD-CT to be at greater risk of accidental injuries than those without ADHD-CT. We found that accidental injuries in children with ADHD-CT were associated with higher levels of hyperactivity/impulsivity symptoms, autism symptoms and anxiety symptoms; whereas motor proficiency was not associated. Though these findings require replication in larger samples, they suggest that accident proneness in children with ADHD-CT may be related to behavioural, social and emotional symptoms, rather than proficiency of motor skills or motor delays. Further research is needed to investigate the mechanisms behind this.

PS-057

Functional somatic symptoms: structural equations of a conceptual model in a Spanish sample

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Background: Functional somatic symptoms (FSSs) are quite common among children. Data suggest an important association with anxiety, parental overprotection and high rates of psychiatric disorders and physical complaints in parents. Objective: The aim of this study is to verify the effect of these variables on FSSs manifested by children through a structural equation model.

Methods: Data were analyzed from a sample of 672 children aged 6 to 8 years who were enrolled in the first and second years of elementary school in Osona (Catalonia, Spain). Parents informed about the presence of FSS in children, child and parental psychiatric symptoms, absences from school and pediatric visits. They also reported about parental overprotection and parental physical complaints. Structural equation modeling (SEM) was used. Results: The final model showed an excellent fit (model fit: χ^2 (df = 542) = 851.7, $p < 0.001$; CFI = 0.91; TLI = 0.91; RMSEA = 0.02). The variables separation anxiety ($\beta = 0.18$; $t = 2.2$; $p < 0.05$), specific phobia ($\beta = 0.19$, $t = 2.5$; $p < 0.05$), parental somatic symptoms ($\beta = 0.29$, $t = 3.9$; $p < 0.001$) and female gender ($\beta = 0.28$, $t = 3.1$; $p = 0.001$) had a direct effect on FSSs.

Conclusions: The results of SEM suggest that separation anxiety, specific phobia, somatic symptoms in a family member, and female gender should be considered important factors for understanding the presence of FSSs in children aged 6–8 years. In clinical practice, pediatricians and child mental health specialists should assess these aspects in children with FSSs. Children with anxiety symptoms should be considered a group at risk of showing functional somatic symptoms. It is possible that anxious children show greater vulnerability to FSSs. This vulnerability may be based on psychobiological, genetic or temperamental factors. Future research should clarify the nature of the relationship between anxiety and FSSs. Genetic studies of parents and children with FSSs would also be interesting to verify the existence of genetic similarities, which would increase understanding of the etiology of FSSs in childhood.

Keywords: Children; Functional somatic symptoms; Psychopathology; Structural equation modeling.

PS-058

Illiteracy and migration in Parisian vocational high schools

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School failure has become a major concern in France, with disorders taking many different shapes, from learning to behavioral problems, including illiteracy, aggression and withdrawal. In 2013, out of 994 students entering 11 Parisian vocational high schools, 215 were illiterate, i.e. 22 %. While 65 % of them were migrants, still in the process of learning the school language, 31 % were children of migrants, who were born in France and had completed 13 years of French scholarship. We interviewed 20 of them, as well as 11 of their mothers, 4 of their fathers and 30 of their teachers and directors, in order to identify vulnerability, protection and prevention factors. We thus retrospectively investigated all participants' school and family histories, and family-teachers' relationships. Data were analyzed with the qualitative grounded theory methodology. Results show a specific vulnerability, peaking at the beginning of primary school, due to linguistic but also to sociocultural, historical and political factors. First, the French school system fails to take into account the fact that for those children of migrants, French often is a second language, which would require to be taught as such. Second, most of those students indeed have western African origins and come from countries who share a colonial past with the hosting country. In other cases, families fled the country of origins because of war or dictatorship. Generally,

early interactions were hindered by traumatic parental experiences. They lead to a feeling of insecurity and illegitimacy which would require specific pedagogical conditions and teachers competences. We thus identified specific pedagogical needs for families coming from a minority culture or social class. Teacher's affective and relational skills have proven efficient to address learning disorders. We thus developed an original training design within the school system to allow teachers to elaborate their counter-transferential reactions and to help create a new school environment based on partnership between students, parents and teachers. Taking into account the geopolitical and counter-transferential dimensions of the pedagogical relationship indeed seems to be necessary and to constitute an effective prevention factor, leading to promising partnership between clinicians and educators in order to allow for educational success for all, towards an inclusive school system and society.

Sarot A (2013). The access to knowledge in a migration situation - Illiteracy prevention perspectives in Parisian Vocational High Schools. Research Masters' Thesis. University of Paris Descartes.

Sarot A (2014). L'accès aux savoirs en situation de migration. Paroles d'élèves, de parents et d'enseignants. Sarrebruck, Presses Académiques Francophones.

PS-059

Influencia de los estilos educativos y variables de personalidad en pacientes con trastorno de conducta

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Las prácticas de crianza que ejercen los padres están determinadas por los factores de personalidad, las experiencias previas y las características personales de cada uno de los progenitores y éstas influyen directamente en la conducta de los hijos. De hecho se observa que entre los diferentes estilos educativos, el permisivo, autoritario y el negligente son los que más precipitan la aparición de la violencia filio-parental (Ibabe et al. 2007). La presente investigación tiene como objetivo evaluar los estilos educativos y las variables de personalidad de los progenitores de un grupo de pacientes con Trastorno de Conducta e investigar la interrelación que tienen estas variables con la violencia filio-parental. Para ello hemos evaluado a un grupo de pacientes (N = 30) ingresados en régimen de Hospitalización completa en ITA (Unidad Trastornos de Conducta) y a sus progenitores. Se emplearon los siguientes instrumentos; Para evaluar los estilos educativos y el clima familiar se emplearon: EMBU-A, EMBU-P y el FES. Para la evaluación de la personalidad se emplearon el MCMI-II (para los progenitores) y el MACI (para los adolescentes). Para la evaluación de la violencia filio-parental se empleó el CTS-CP, el AQ y la Escala de Exposición a la violencia. En cuanto a la sintomatología asociada se emplearon el BDI, el STAI y el CORE. Y por último se tomó una medida para la evaluación de la Inteligencia Emocional, el TMMS-24. Los resultados muestran la relación que se establece entre los diferentes estilos educativos, el clima de la familia, la personalidad, la sintomatología y las variables emocionales en la aparición de la violencia en la familia

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PALABRAS CLAVE: VIOLENCIA FILIO-PARENTAL, ESTILOS EDUCATIVOS, PERSONALIDAD, TRASTORNO DE CONDUCTA.

PS-060 Insecure self esteem in adolescents with social anxiety

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Background: Recent studies support that low self-esteem (SE) is related to the onset and maintenance of social anxiety (SA), although comorbid depression explains part of the association between SA and low SE. Although SE is a complex construct, most studies only measure explicit self-esteem (ESE), the most cognitive, conscious and deliberate part of SE. Growing evidence suggest that also Implicit self-esteem (ISE), i.e. the most affective, unconscious and automatic part of SE, should be measured along with ESE for a complete measure of this dimension. The discrepancy between ISE and ESE has been associated to psychopathology and impairment. In the case of SA, low ESE along with preserved ISE (i.e., the so-called insecure ‘damaged’ SE) is a relatively common finding. However, discrepant and therefore not concluding results suggest the possible intervention of intermediate variables. Apart from depression, Emotional Intelligence (EI) and Reflective Function (RF) (i.e., the capacity to read own and others mental states) is a potential important mediator, given that this capacity may become underdeveloped as a consequence of the avoidance of social interaction. Moreover, the ISE is developed based on the relationship with the caregivers, so the quality of the attachment style may also have a mediator effect on the quality of ISE.

Objective: The aim of this study is to analyze the effect of the candidates, additional to depression, to play this intermediary role: the attachment style, mentalization and EI.

Method: Two hundred and fifty-three youngsters aged 12–19 years old were assessed on measures of SA, implicit SE, explicit SE, depression, mentalization deficit, EI and attachment style.

Results: As expected, the association between ESE and SA ($\beta_{SASA} = -0.56$) was mediated by depression ($\beta_{BDI} = -0.51$). Results also reveal a slight but significant relationship between ESE and EI ($\beta_{TMMS} = 0.16$). In consistency to previous research, in this study damaged insecure SE (i.e., discrepancy based on low ESE but high or preserved ISE) was associated to SA ($\beta_{DAM} = 0.37$), although it also showed significant relationship to depression ($\beta_{BDI} = 0.40$) and to the interaction between depression and SA ($\beta_{SASA \times BDI} = 0.73$).

Conclusion: These results highlight the importance of considering depression when the association between SA and SE is analyzed. Additionally, this study suggests that discrepancy between ISE and ESE is something relevant when dealing with adolescent SA. Finally, results suggest that the interaction (i.e., comorbidity) between SA and depression make the outcomes regarding SE worse than those of cases with no comorbidity.

Keywords: Social anxiety, Adolescents, Depression, Self-esteem, Security of self-esteem, Discrepant self-esteem, Reflective function, Emotional intelligence, Attachment style.

PS-061 Irritability: temperament, symptom or disease?

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Background: The DSM-5 brought irritability to the spotlight, in response to the increasing scientific interest in this subject. Although one of the most common features in the child and adolescent psychiatry population, there is still a lot of controversies in how to diagnose severe irritability. A new diagnostic category, Disruptive Mood Dysregulation Disorder, was included in the DSM-5 in order to include children/adolescents with chronic and severe irritability in association with behaviour outbursts, who do not meet the full criteria for a Bipolar Disorder. Still, the diagnosis of irritable children/adolescents is far more complex, since irritability is also a common feature in other frequent child and adolescent psychiatric disorders.

Methods: With this study we aim to discuss two clinical cases of irritability that illustrate the controversies around the diagnosis and treatment of this condition. We also present a comprehensive revision of the most recent literature regarding irritability.

Results: Although irritability and behavioural issues were the core features in both clinical cases, the clinical diagnosis were quite different. One of the clinical cases was diagnosed as DMDD, while the other was considered to be a case of Border line Personality traits and a Conduct Disorder NOS. There were some differences regarding the treatment options, nevertheless we still used similar pharmacologic strategies to treat both conditions.

Conclusion: This paper raises questions about the validity of irritability as a diagnostic category versus a view on irritability as a symptom shared by various psychiatric conditions, especially during childhood. There is a tremendous lack of studies concerning the differential diagnosis between DMDD and Personality Disorder traits, thus clinical reports subject to this theme are especially important. More longitudinal studies are needed to support the existence of DMDD as an individual category, since pharmacological treatment does not seem to be distinctive from that used in case of irritability due to other psychiatric conditions.

Keywords: Irritability, Child and adolescent psychiatric disorders, differential diagnosis, DMDD, Border Line Personality traits.

PS-062 Major depression and a suicide attempt due to isotretinoin treatment: a pediatric case report

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Acne is the most common skin disease treated by dermatologists, affecting up to 85% of people aged 12–24 years. As much as 30–50% of acne patients suffer from psychiatric problems such as depression, low self-esteem, anxiety (particularly social phobia) and social maladjustment. Suicidal ideation and suicide attempts are also approximately twice as common in individuals affected by acne.

Isotretinoin (13-cis retinoic acid) is a synthetic oral retinoid that is used in cases of severe, recalcitrant, nodulocystic acne, not resistant to other therapies. Isotretinoin treats acne by reducing sebaceous gland size, inhibiting formation of new comedones, reducing growth of propionibacterium acnes and decreasing inflammation.

There are factors suggesting an association between isotretinoin and depression. Isotretinoin affects the brain’s retinoid system, which is known to play a role in depression-related neurotransmitters and brain areas. Isotretinoin treatment decreases brain metabolism in the human orbitofrontal cortex, a brain area known to mediate symptoms of depression.

S.M. is a 16 years 9 months female, who goes to high school and is in second grade. 6 months ago, she went to a dermatologist for her acne problem and was prescribed 30 mg/day isotretinoin. After the first

month of treatment her prescription was changed to 40 mg/day. After 3 months her acne problem was reduced and she had no side effects other than dryness of mouth and lips. The patient had never experienced psychiatric symptoms in her life, except for the last 2 months; which included a depressed mood, anhedonia, increased time of sleep, feeling tempered, numbness, trouble in focusing almost everyday. During her treatment, she started to feel anxious, not wanting to go to school, selfblaming and had suicidal ideas for a week and didn't consult a psychiatrist. 3 days ago she attempted suicide by taking 24 isotretinoin pills and was hospitalized in pediatric intensive care unit. She was consulted to our department of child psychiatry and was diagnosed with drug-induced depressive disorder. The patient's acne problem was cured and after consulting the dermatologist, isotretinoin treatment was discontinued. The patient was prescribed fluoxetine 20 mg/day and is still being followed by child psychiatry regularly.

Treatment of isotretinoin in adolescents may cause severe psychiatric symptoms such as major depressive disorder and suicidal attempts. Adolescents who are in use of isotretinoin must always be assessed for psychiatric symptoms in follow ups and if psychiatric symptoms occur, psychiatric consultation should be requested as soon as possible.

PS-063

Major life event's role in the anxiety level of preadolescents in a community sample: a log-linear analysis model

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Background: Children's functioning is affected by major life events (especially adversities). Children with good emotion regulation skills are more capable of being less affected by the adverse events. Anxious children, however, may already have reduced capacity to regulate their emotions (Thompson, 2011).

Method: In this study, we explored associations between the factors that may have an impact on child's psychosocial functioning. Children's level of anxiety was examined in terms of its relation with adverse life events. These events include a severe illness within the family, severe economic crisis in the family during the past 6 months and academic failure of the child.

The data was collected from a non-clinical school sample in İstanbul. Participants included 1175 2nd to 8th grade students, from 3 primary and secondary level public schools in low to middle SES neighborhoods. Demographic questionnaires, a nationally validated measure of psychosocial functioning/impairment (Wolmer, L. et. al, 2005) and Achenbach Child Behavior Checklist (CBCL) were filled out by the parents while academic and school behavior ratings were collected from teachers.

Results: Exploratory frequency analysis was performed to develop a log-linear model for the analysis of "presence of a clinical level of anxiety" and the factors affecting children's daily functioning. In the first step, the fit for the saturated log-linear model was explored and partial associations were examined. The K-way Higher Order effects show that all main effects and 2 way interactions were significant; whereas the 3 and more way interactions were insignificant. (LR $\chi^2 = 1487.107$; $p = 0.000$ for one-way; LR $\chi^2 = 102.416$; $p = 0.000$ for two-ways).

Discussion: Several factors in child's life can affect the functioning of the child both in the emotional and academic sphere. Our results indicated an association between anxiety, economic distress and academic success, but not with illness in the family. These factors when together and in interaction can be detrimental to child's psychosocial functioning.

The findings can be used in developing preventive strategies for children and adolescent mental health.

Keywords: Preadolescents, Anxiety, Life-events, Academic success.

PS-064

Más que palabras: agresividad auto y heterodirigida en adolescentes

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Entre los fenómenos frecuentemente descritos en adolescentes con diferentes patologías psiquiátricas, el apartado de las conductas autodestructivas cobra especial relevancia debido de los actos autolesivos responde a factores diversos como la presencia de inestabilidad emocional o la concurrencia de trastornos afectivos. En esta mesa se abordarán las conductas autodestructivas presentes tanto en Trastornos de la Conducta Alimentaria (TCA) como en Trastornos de Conducta (TC). Concretamente se abordarán la violencia filio-parental, las autolesiones y el suicidio.

Ponencia 1: VALORACIÓN Y GESTIÓN DE LA VIOLENCIA FILIO-PARENTAL (VFP) EN ADOLESCENTES CON PROBLEMAS DE SALUD MENTAL

Antonio Andrés Pueyo. Catedrático de Psicología. Departamento de Personalidad, evaluación y tratamientos psicológicos. Universitat de Barcelona (UB)

Ponencia 2: SUICIDIO EN ADOLESCENTES CON TRASTORNOS DESTRUCTIVOS DEL CONTROL DE IMPULSOS Y DE LA CONDUCTA Y TRASTORNOS DE LA CONDUCTA ALIMENTARIA

Gustavo Faus. Psiquiatra. Director Asistencial Instituto de Trastornos Alimentarios (ITA)

Ponencia 3: AUTOLESIONES EN ADOLESCENTES CON TRASTORNOS DE CONDUCTA Y TRASTORNOS DE LA CONDUCTA ALIMENTARIA

Antoni Grau. Psicólogo. Jefe Conocimiento e Investigación. Instituto de Trastornos Alimentarios (ITA)

PS-065

Mental and behavioral variation in children with morbid obesity

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Within the concept of an unfavorable course of psychopathology in childhood obesity (morbid forms) was studied 112 children: 55 children with morbid obesity [BMI > 30 kg/m²; m = 27, d = 27; age 13.65 ± 3.0 ($\sigma = 0.4$)] and 57 non-obese children (m = 20, d = 37) aged 14.36 ± 2.36 ($\sigma = 0.3$).

To assess psychopathology used Child Behavior checklist (CBCL) 6-18.

To study the phenomenon of compulsive overeating—Children Eating Disorder Examination-Questionnaire (ChEDE-Q) to fill the parents.

The Results: The sum total scores of mental and behavioral disorders on the scales CBCL 6-8 in children with morbid obesity is 1.4 times higher than in the control group ($p = 0.008$; Cohen's $d = 0.56$). Obese children have a significantly more common symptoms of social exclusion ($F = 17.68$, $p = 0.000$, Cohen's $d = 0.63$), anxiety and depressive symptoms ($F = 10.32$, $p = 0.002$, Cohen's $d = 0.78$), attention deficit ($F = 12.94$, $p = 0.001$, Cohen's $d = 0.78$), hyperactivity/impulsivity ($F = 7.10$, $p = 0.009$, Cohen's $d = 0.57$), ADHD ($F = 9.15$, $p = 0.003$, Cohen's $d = 0.60$).

The largest ($\lambda_2 = 71,13-74,86-87,56$) significant differences ($p = 0.000$) were obtained on items CBCL 6-8: "vicious, rarely open to others"; "Inactive, devoid of energy"; "Incredulous, has a lot of suspicion."

In children with morbid obesity revealed a strong correlation ($r = 0.83$; $p = 0.000$) between attention deficit and anxiety-depressive symptoms, as well as between attention deficit and social exclusion ($r = 0.80$; $p = 0.000$). Which may indicate a certain "weakness" of the nervous system in relation to the stress resistance in obese children and explains much of the inefficiency of dietary restriction in the treatment of morbid obesity forms.

Internal consistency empirically based ChEDE-Q (ratio α -Cronbach) ranged from 0.66 to 0.88; the average ratio was 0.79.

Reliable significant differences reliability ChEDE-Q by sex and age were found.

Comparison of mean values of scales ChEDE-Q revealed a significant difference in clinical and control groups ($F = 6.25$, $p = 0.016$).

The phenomenon of compulsive overeating in relation to psychopathology scales on CBCL 6-8 had a significant correlation with symptoms of anxiety and depression ($r = 3.81$, $p = 0.003$), social exclusion ($r = 3.39$, $p = 0.003$), hyperactivity/impulsivity ($r = 2.6$, $p = 0.025$), attention deficit disorder ($r = 2.4$, $p = 0.033$).

PS-066

Meta-analysis of locomotor activity measures in attention-deficit/hyperactivity disorder

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Lourdes Garcia Murillo, MD, Samuele Cortese, MD, PhD, David M. Anderson, PhD, Adriana Di Martino, MD, Francisco Xavier Castellanos, MD

Objective: To assess group-differences in movement measures in published studies contrasting Attention-Deficit/Hyperactivity Disorder (ADHD) vs. controls.

Background: ADHD diagnoses continue to be completely based on clinical history, which is subjective and subject to recall bias. In response, investigators have proposed incorporating objective measures such as locomotor activity which can be measured with actigraphy or with a high spatial and temporal resolution infrared camera. In May 2014, the United States Food and Drug Administration cleared an example of the latter, the Qb-Test, as a device to be used in supporting the diagnosis of ADHD. A review of the literature did not reveal any prior meta-analyses of such data.

Methods: We performed a systematic review and meta-analysis of published studies on motion measures contrasting individuals diagnosed with ADHD and healthy controls. Two authors reviewed a total of 89 abstracts culled from an initial search of 356. After applying inclusion and exclusion criteria, 13 papers were included in our

analyses of actigraphy and five papers in analyses of motion tracking systems.

Results: The combined sample sizes were 406 patients with ADHD versus 359 controls with actigraphy data and 164 patients with ADHD versus 156 controls with motion tracking system data. Meta-analyses revealed medium effect sizes for actigraphy (standardized mean difference [SMD]: 0.64, 95 % CI: 0.43, 0.85) and large effects for motion tracking systems (SMD: 0.92, 95 % CI: 0.65, 1.20) in differentiating individuals with ADHD from controls.

Conclusions: When measured objectively, locomotor hyperactivity robustly differentiates groups of patients with ADHD from healthy controls. Inclusion of objective locomotion measures is likely to be useful in circumstances in which ancillary information is not available, such as when evaluating adults with possible ADHD. However, even the relatively large effect sizes reported to date are unlikely to yield clinically actionable information for individual patients on their own. How to best incorporate such objective data in the diagnostic process remains unclear.

PS-067

Missed clues for early detection of Asperger syndrome: a comparison between early and late children visitors

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Objectives: Despite the integration as autism spectrum disorder, interest in Asperger syndrome as an independent disorder is growing in clinical practice. This retrospective study investigated the clinical clues valuable for the early diagnosis of Asperger syndrome.

Subjects and methods: Authors reviewed hospital records retrospectively for patients diagnosed as Asperger syndrome with more than 3 additional visits during the period of September 1998 to August 2013 at Kyung Hee university hospital. 41 patients were fit for the criteria. Among 41, ten patients were excluded who had mental retardation as comorbidity. Therefore, we examined 31 patients as final subjects. Firstly, we analyzed the characteristics of all subjects. Secondly, we divided the subjects into two groups by the age under or above 13 years old on the first visit to the hospital, and compared with the two groups.

Results: The mean age of all subjects was 14.3 ± 6.6 years old and males were 27 (87.1 %). Difficulty in peer relationship was the main reason for the hospital visit. Among 18 caretakers who answered the question about patients' language development, 17 agreed with the delay of language development. The full scale intelligence quotient (IQ) was 103.0 ± 15.0 and difference between verbal IQ and performance IQ was not statistically significant. 17 out of 31 patients had taken electroencephalography and 8 subjects showed abnormal findings. From the comparison between two groups depending on the age of the first diagnosis as Asperger syndrome, the older group revealed more comorbidity and more medications than younger ones. Attention deficit/hyperactivity disorder (ADHD) was the commonest comorbidity and antidepressant was the commonest drug. The education level of father and mother was no statistical significance.

Conclusions: These results suggest that non-specific delay of language development and peer relationship problem would be the critical clues for early detection of Asperger syndrome.

Keywords: Asperger syndrome, Autism spectrum disorder, Language, Peer, Neurologic deficit, Intelligence.

PS-068N^o109**Mum, feed me with love. Eating disorder and disorganized attachment**

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Introduction: There is a parallelism between disorganized attachment and dissociative disorders. Is not only the presence of an disorganized attachment.

There is a parallelism between the disorganized attachment and dissociative disorders. Not only is this disorganized attachment, the single etiological factor in the emergence of dissociative state, there is a “diathesis stress” model of where the disorganized attachment leads to a vulnerability to the dissociation in response to a later trauma.

Objectives: The clinical case illustrates the relationship between the emergence of an eating disorder with the presence of a disorganized attachment and an episode of sexual abuse during adolescence.

The patient presents trance ‘episodes’ when she had purging behaviors with enemas with the purpose of “cleaning herself”. These behaviors began a few years after having suffered sexual abuse.

Hypothesis: 17-Year-old woman who was admitted because of anorexia purgative symptoms. During his childhood, she grown up with the help of a nanny because her parents are barely in house. Parents were defined as cold, distant and non emotional. When she was 14 she suffered from an episode of sexual abuse, after that, she started to enemas in a compulsively way due to the constant idea of she was dirty inside. Finally, she was admitted in our inpatient unit. During she was in the inpatient unit, she still had these cleaning while she was in trance, with sexually explicit conduct and self injuries.

Conclusion: The presence of an emonocional trauma in patients with a disorganized attachment plays a very important role in the development of a dissociative episode and a secondary way of ED.

In patients with an ED, there is a high frequency of sexual abuse. In this case, the purging behaviors were more secondary to the traumatic event that a desire to lose weight.

PS-069**iMum, please, don't leave me alone!**

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Keywords: anxiety, separation anxiety, somatic complaints, marital separation, anticipation, regressive behaviors.

We review separation anxiety disorder through the case of a 5-year-old girl served in our unit of child and adolescent mental health after have been derived by her pediatrician by anxiety symptoms in relation to marital separation.

When child moves away from his parents is very common in childhood feel anxiety. It usually starts at 6 months of age, but is about 2-year-old when fear is intensified. During early infancy this fear means a protection mechanism against the environment hazards, but when anxiety is disproportionate may constitute a psychological disorder.

Separation anxiety disorder prevalence is estimated around 4 % in children and young adolescent, with one incidence higher in females.

The average age of the children who suffer from this disorder is approximately 9-year-old. For diagnosis, it is necessary that the child expresses high anxiety before the separation of attachment figures, home or the anticipation of these. The anxiety tends to be accompanied by other symptoms, which must persist for at least 4 weeks, as excessive discomfort, somatic complaints, persistent concern, refusal to go to school, to be alone at home, to sleep if he is alone, etc. The disorder is disabling for the child, since it affects negatively their activity and development.

Our patient is a girl of 5-year-old whose parents have recently separated, she is derived to our consultations by her primary care pediatrician because she refusal to attend to school, she has anxiety symptoms, irritability, regressive behavior, anxiety to separate from her mother, alterations of behavior at home, refusing to go with her father when he has visits... for several months. We do the assessment of the case and intends to a cognitive-behavioral psychotherapy.

PS-070**One-year outcome of severe eating disorders in adolescence after a multi-component therapeutic intervention (anabel plus study)**

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Introduction: Clinical course of eating disorders (ED) is variable. There is not an agreement about the definition of ED remission. Some studies show a rate of total remission at 12 months about 40 % after an outpatient family behaviour intervention (Robin 2003; Lock 2010).

Objectives: To analyze 1-year clinical outcome of severe eating disorders in female adolescence after a interdisciplinary and familial therapeutic intervention.

Methods: Naturalistic and longitudinal study of 115 ED adolescents seeking for treatment in a reference ED Unit. Social-demographic, clinical, familial, psychometric variables are studied at baseline and at 6, 12, 18 and 24 months after initiated the multi-component treatment. Diagnosis is completed by K-SADS interview.

Results: Baseline: age: 14.55 years (s.d.:1.35). 103 (88.8 %) post-menarchial. Overweight antecedent: 21 (18.3 %). Psychiatric antecedent: 23 (19.8 %). Duration ED: 10 months (s.d.: 6.73). Percentage lost weight: 21.4 % (s.d.: 8.37). BMI at presentation: 16.1 (s.d.: 1.77). Amenorrhea: 81 (70.4 %). Excessive exercise: 64 (55.2 %). DSM-IV-TR diagnosis: Restrictive Anorexia Nervosa (RAN): 69 (60 %), Eating Disorders Not otherwise specified (EDNOS): 28 (24.3 %) and Purgative Anorexia Nervosa (PAN):18 (15.7 %). EAT-40: 37.50. CDI: 16.50. Percentile STAI state: 93. Psychiatric comorbidity 33 (30 %). 6 months follow-up: BMI: 18.50 kg/m² (t–student baseline vs 6 months p < 0.01). Amenorrhea 37 (43.7 %). EAT-40: 30.2. (Test t–student baseline vs. 6 months p < 0.01) CDI: 15 (t–student baseline vs. 6 months p < 0.054). Percentile STAI state: 74. 3(t–student baseline vs. 6 months p < 0.015). DSM-IV-TR diagnosis at 6 months: RAN: 32 (36%), EDNOS: 53 (59.6 %) PAN: 2 (2.2 %) and BN: 2 (2.2 %). 12 months follow-up: BMI: 19.1 kg/m² (t–student 6 months vs 12 months p < 0.002 y ANOVA F: 9723,7 p < 0.001). Amenorrhea 27 (39.1%). EAT-40: 25.6 (t–student 6 months vs. 12 months n.s. ANOVA F 178,192 p < 0.001) CDI: 15 (t–student 6 vs. 12 months n.s. ANOVA F 225,65 p < 0.001).Percentile STAI state: 74. 3 (t–student 6 vs. 12 months n.s. ANOVA F 247,07 p < 0.001). DSM-IV-TR diagnosis at 12 months: RAN: 23 (32.9%), EDNOS: 46 (65.7 %) PAN:

0 and BN: 1 (1.4 %). DSM-IV-TR diagnosis at 12 month follow-up is related with BMI at baseline (ANOVA $F:4.3$ $p < 0.005$ EDNOS> RAN).

Conclusions: There is an acceptable physical and psychopathological improvement during the first year of treatment, resulting more evident during the first 6 months. However, neither BMI nor eating attitudes, depression and anxiety are at normal rank at 12 months of treatment in severe ED adolescents. Also one-third maintain diagnosis of RAN and two-third have EDNOS diagnosis at 1 year after starting treatment.

PS-071

Otomac tribe legacy

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Keywords: Pica, Eating disorder, Dr. Alexander Von Humboldt, DSM-V, Conners test, WISC-IV.

We review the eating disorder called pica through the case of a 7-year-old girl served in our unit of child and adolescent mental health after have been derived by her pediatrician because of hyperactivity, behavior disorders and intake of various non-eatable substances.

The origins of this disorder go back to 1800 when Dr. Alexander Von Humboldt found out the case of an indigenous Indians tribe, the “Otomac”, in South America who ate large amounts of mud.

Back to the 21st century, and according to the DSM-V diagnostic criteria we understand pica like an eating disorder characterized by binge eating of non-nutritional substances (mud, chalk, papers, pencils, soap, animal faeces,...) for more than 1 month, inappropriate for the child development level, without it form part of a belief or cultural practice and has no place in the presence of another mental illness (intellectual disability, neurodevelopmental disorders: ASD, ADHD, Tics disorders,...).

Our patient was derived to our child and adolescent mental health unit by her primary care pediatrician motivated by the patient's mother story who referred to him that she had begun to receive school complaints because the girl was impulsive, restless, not disregarded the rules, interrupted classes, attacked verbal and physically against her schoolmates and binge eating pencils, crayons, papers... Her mother had also observed a similar behavior, to that teachers described, at home. During the case evaluation we did a blood analysis, we asked family and teachers to answer Conners test, and we evaluated her intellectual ability with WISC-IV test, all in order to orientate the diagnosis and therapeutic intervention looking for the choice that more benefits could brought her.

PS-072

Pallister-hall syndrome: a review of clinical symptoms of the disease, its evolution and treatment; regarding a specific case

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Introduction: The Pallister-Hall syndrome is a pleiotropic polymalformative disorder inherited in an autosomal dominant manner, yet forms de novo may appear. It is characterized by the presence of a hypothalamic hamartoma, associated with diverse and highly variable malformations: craniofacial, skeletal, cardiac, pulmonary or genitourinary.

Objectives: Literature review of pathogenesis, somatic and psychiatric clinical manifestations and treatment of the Pallister-Hall syndrome, apropos of a clinical case.

A case report: The case of an 8-year-old girl with dysmorphic bone in the upper limbs identified at birth, together with gelastic seizures and precocious puberty, which are diagnosed at the age of two when a space-occupying mass on both thalami is observed in a study of brain magnetic resonance, which happens to be a hypothalamic hamartoma, is presented. According to these findings, the diagnosis of Pallister-Hall syndrome is performed, resulting in features suggestive of a variant of this syndrome. At the age of 8 and after bilateral surgery of both upper limbs with partial ablation of hypothalamic hamartoma by stereotactic gamma-knife radiosurgery, the patient seeks medical consultation in psychiatry regarding consistent behavioral alterations involving significant physical and verbal aggressiveness along with high impulsivity.

Discussion: The disruption of the development of the hypophysis due to the hypothalamic hamartoma may be associated with endocrine abnormalities. Among the manifestations of the central nervous system, in addition to the hamartoma, dysplasia of the corpus callosum is usually observed and in some cases convulsive seizures, as in our patient, which are usually refractory characteristics to the antiepileptic drugs. Gelastic seizures are epileptic manifestations highly characteristic and frequent in patients with hypothalamic hamartoma, starting in the early years of life. Hamartoma ablation attains an improvement regarding to cognitive problems and the associated behavioral disturbances. Cognitive impairment (language impairment, learning disabilities) and behavioral disorder (attention deficit disorder and hyperactivity or ADHD, aggressiveness, anxiety, defiant disorder, etc.) are common in patients with epilepsy associated with a hypothalamic hamartoma. They have been correlated with the frequency and severity of the seizures, but there is debate on this point. The Biopsychoneuroendocrine Unit becomes appointed as the determinant of this behavior: the interrelationship between the environment of the child, its brain injury and the endocrine that affect him.

PS-073

Patient, caregiver and treatment factors associated with medication adherence in the caregiver perspective on pediatric ADHD (CAPP) study in Europe

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Objective: To evaluate the association between attention-deficit/hyperactivity disorder (ADHD) medication adherence and the following factors: socio-demographic characteristics of patients and caregiver, ADHD severity, co-morbid conditions and treatment types.

Methods: CAPP is a cross-sectional online survey completed by caregivers of children/adolescents (6–17 years) with ADHD between 2012 and 2013 in 10 European countries: Denmark, Finland, France, Germany, Italy, the Netherlands, Norway, Spain, Sweden and the United Kingdom. Denmark, Finland and Norway were combined (other Nordic)

for analysis because of small sample sizes. Responses were collected from caregivers of children/adolescents who were taking pharmacological treatment for ADHD at the time of survey completion (current users) or had done so within the previous 6 months (prior users). Data for current and prior users were analysed separately. Prior users reported on the last medication taken. Caregivers were asked to estimate the degree of adherence to prescribed medication, and a binary adherence outcome was defined (adherence defined as taking medication $\geq 80\%$ of the time on school days and $\geq 50\%$ on weekends/holidays). Multiple logistic regression models were used to examine the simultaneous relationship between adherence and socio-demographic, clinical and treatment factors. Statistical significance was defined as $p < 0.05$.

Results: Among 3688 respondents, 3015 (81.8 %) could be evaluated for adherence; 1833/2461 (74.5 %) current users and 330/554 (59.6 %) prior users reported being adherent. Compared with current users, prior users were significantly older (12.4 vs 11.6 years) and less severely ill (14 vs 31 %), but proportions of males were similar (78 vs 81 %). Significant factors associated with higher adherence across both current and prior users were older age, mothers being caregivers compared with fathers and other caregivers and more severe ADHD. Among prior users, no other factors were significant. For current users, adherence levels varied by country (the United Kingdom, other Nordic and Sweden were most adherent), and higher adherence was observed with monotherapy (for stimulants and non-stimulants) versus combination therapy. Additional significant factors associated with better adherence in the current users model included: absence of aggression, parents not diagnosed with ADHD, caregivers with less responsibility caring for the child and prior treatment with multiple medication types or stimulants only compared with no prior drugs.

Conclusion: Better adherence was found with older children, respondents who were mothers and patients with more severe ADHD. Monotherapy stimulant and non-stimulant users were more adherent relative to combination users. There was significant variation in adherence across EU countries.

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PS-074

Patient, caregiver and treatment factors associated with symptom control among treated patients in the caregiver perspective on pediatric ADHD (CAPP) study in Europe

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Objective: To evaluate the association between attention-deficit/hyperactivity disorder (ADHD) symptom control (SC) and the following factors: patient and caregiver socio-demographic characteristics; ADHD severity; psychiatric comorbidities; treatment types.

Methods: CAPP is a cross-sectional online survey of caregivers of children (6–17 years) with ADHD fielded between 2012 and 2013 in 10 European countries: Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Spain, Sweden and UK. Assessments of child's SC while receiving pharmacological treatment for ADHD at time of survey completion were analysed. Caregivers evaluated SC levels as 'very controlled', 'controlled', 'moderately controlled', 'a little controlled' or 'not controlled'. The last two levels were combined because of small samples. ADHD severity during treatment interruption (off medication as baseline proxy) and while on medication

were measured using the ADHD Rating Scale, Version IV (ADHD-RS-IV) total score (TS). Significant factors at $p < 0.05$ are reported.

Results: Among 3688 respondents, 2853 (77 %) respondents whose child was using ADHD medication at time of survey completion were evaluated. Child mean (SD) age was 11.4 (3.1) years, 81 % were male; 67 % of caregivers were female. SC was rated very controlled, controlled, moderately controlled and little/not controlled for 594 (21 %), 1296 (45 %), 798 (28 %) and 165 (6 %) respondents, respectively. Better SC was reported with lower ADHD-RS-IV TS at baseline ($p < 0.001$). Mean (SD) ADHD-RS-IV TS for the four descending SC levels were 33.1 (13.1), 33.3 (12.1), 37.0 (11.7), 38.5 (12.9) at baseline and 11.6 (9.3), 13.8 (7.9), 17.4 (8.9), 23.4 (11.6) on medication and mean (SD) number of reported comorbidities were 0.9 (1.2), 1.0 (1.5), 1.0 (1.4) and 1.4 (1.5). Most common comorbidities significantly associated with lower SC level were anxiety (very controlled, little/not controlled: 10 %, 19 %), aggression (10 %, 19 %), conduct disorder (10 %, 18 %) and oppositional defiant disorder (3 %, 12 %). Significantly better reported SC was associated with children of younger age (very controlled, little/not controlled: 11.4, 12.1 mean years) and caregivers who were married (84 %, 68 %), male (31 %, 23 %) or had college/higher education levels (42 %, 31 %). SC varied by country with ranges of 11–40 % for highest and 1–10 % for lowest SC levels.

Conclusion: SC was rated as better in younger children with lower ADHD severity and fewer psychiatric comorbidities, and in caregivers who were married, male and had higher education. There was significant SC variation across countries. These data suggest there may be opportunities to improve current treatment in more severe and comorbid ADHD patients.

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PS-075

Patterns of multi-informants among Asian families of youths with mood and anxiety disorders

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Introduction: Clinician diagnoses are dependent on the perspectives and characteristics of the individual providing answers. Hence, having multi-informants may allow for a more balanced assessment. However, it is important to understand informant response patterns to effectively make sense of the information provided. Research has shown low to moderate correlation between parent-child reports and moderate correlation between self-collateral reports in European/American samples. Little is known about the patterns of Asian multi-informants for youths with affective disorders. Hence, we examined the patterns of parent-child reports and self-spousal reports of internalizing and externalizing problems among Asian families of youths with affective conditions.

Method: Children with affective disorders and their parents were recruited from a Singapore child psychiatric clinic as part of a larger epigenetic study. Youths completed the Youth Self Report (YSR) and one parent completed the Child Behavior Checklist (CBCL). Both parents completed the Adult Self Report (ASR) and Adult Behavioral Checklist (ABCL) for themselves and their spouse respectively. Mean age of children was 16 years (SD = 2.26) and 65.7 % were female. Mean age of adults was 48 years (SD = 6.05). The sample was 80 % Chinese, 9 % Indian and 11 % Others.

Results: Data were available for 35 parent-child and 28 self-spouse reports. Child-reported internalizing problems on the YSR were moderately correlated with parent-reported CBCL internalizing

scores, $r = 0.42$, $p < 0.05$. Youths were found to self-report more internalizing symptoms ($M = 29.14$, $SD = 12.12$) relative to parent-reports ($M = 19.23$, $SD = 11.66$), $t(34)=4.58$, $p < 0.05$.

Child-reported externalizing problems were also moderately correlated with parent-reported externalizing problems, $r = 0.54$, $p < 0.01$. Youths reported significantly more externalizing symptoms ($M = 13.26$, $SD = 7.73$) relative to parent-reports ($M = 7.43$, $SD = 7.43$), $t(34) = 4.75$, $p < 0.01$.

Self-reported internalizing problems on the ASR were moderately correlated with spouse-reported internalizing problems on the ABCL, $r=0.61$, $p<0.01$. A similar trend was also found for externalizing problems, $r = 0.52$, $p < 0.01$. Scores on the self- and spouse-report for both internalizing and externalizing problems did not differ significantly.

Conclusion: The moderate agreement between Asian multi-informants reinforces the need to incorporate multiple sources in assessments. Rather than perceiving them as unreliable, each informant may be providing useful information from different perspectives. Previous research has highlighted the need to consider the nature of youth problems on under-reporting, and we found that Asian youths with affective disorders did not exhibit such patterns of under-reporting. Asian parents have similar perceptions to each other and there may be less need to obtain reports from both parents in an assessment. Understanding these patterns can help to refine future assessment procedures.

PS-076

Preliminary results of the neurodevelopmental disorders epidemiological research project (EPINED)

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EPINED is a double phase cross-sectional epidemiological study that is being carried out to investigate the epidemiology of autism spectrum disorders (ASD), social communication disorder (SCD) and attention deficit hyperactivity disorder (ADHD) in school-aged population of Tarragona, Spain. We aimed to study a representative sample of approximately 7,000 subjects in two age periods: 4–5 and 10–11 years. This sample corresponds approximately to 40 % of the population in Tarragona.

The access to participants is taking place in public and private schools since 2014, through an agreement with Department of Education of Generalitat de Catalunya. In the first phase, parents and teachers answer screening questionnaires—specifically: Childhood Asperger Syndrome Test (CAST), CONNERS and EDUTEA (developed ad-hoc). In the second phase, the subjects at risk of these disorders and a subsample without risk (controls) are assessed. Diagnosis is performed according to DSM-5 criteria using information from the family (ADI-R, K-SADS and CBCL), the children (ADOS, YSR, WPPSI-IV/WISC-IV and specific subtests of BLOC and ENFEN) and from scholar quantitative and qualitative reports.

Preliminary results are obtained in a sample of 2150 subjects, in which participated all teachers and 48 % of the families. In the first phase, teachers reported ASD risk symptoms in 3.7 % of preschoolers and 4.9 % of school-aged children. Parents reported 7.7 and 4.3 %, respectively. Teachers also described SCD risk symptoms in 2.5 % of preschoolers and 4.9 % in school-aged. ADHD risk symptoms were reported by teachers in 2.8 and 19.3 %, with higher rates in older children. The same occurs in parent rates, with values of 20.8 and 35.5 %. Second phase results indicate an ASD prevalence of 1.43 % (IC 95 % 0.4–2.4). Of these children, 78 % were previously diagnosed by mental health services. Related to severity, 29 % presented mild

ASD symptoms, 57 % moderate and 14 % severe manifestations. The male to female sex ratio was 2:1. The prevalence of ADHD was 5.6 % (IC 95 % 3.7–7.4), with 80 % of cases previously diagnosed. The prevalence among preschoolers was 3.1 % (IC 95 % 1.0–5.1) and 8.2 % (IC 95 % 5.0–11.4) among school-aged children. The male to female sex ratio was 1.7:1.

Our results show an elevated prevalence of ADHD risk symptoms in preschool and school-aged children, reaching values up to 40 % in parents' reports. We also want to highlight the great amount of sub-clinical ASD and ADHD manifestations that were found in the sample. Prevalence rates of ASD (1.48 %) and ADHD (3.1–8.2 %) are in agreement with recent international findings in school population samples.

PS-077

Prenatal, perinatal and developmental risk factors of attention-deficit hyperactivity disorder

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Objectives: Attention-deficit/hyperactivity disorder (ADHD) is generally accepted as having a genetic basis but environmental influences have also been reported as contributing factors. Environmental risk factors including perinatal complications and psychosocial adversities may interact with genetic susceptibilities in complex ways, influencing the risk of developing ADHD. The purpose of this study was to examine the prenatal, perinatal and developmental risk factors of ADHD, as compared to the unaffected siblings (SIB), and typically developing children (TC).

Methods: Subject with ADHD, their SIB, and TC were recruited from a child psychiatry outpatient clinic of Asian Medical Center Children's Hospital. Psychiatric diagnosis and comorbidities were confirmed based on Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (K-SADS-PL). The parents of the children completed the questionnaires on perinatal and developmental risk factors.

Results: Fifty-eight individuals with ADHD (41 boys, 7.7 ± 1.3 years), 21 SIB (8 boys, 8.2 ± 1.8 years), and 22 TC (8 boys, 8.5 ± 2.1 years) were included. The ADHD group had higher rates of maternal stress during pregnancy than the SIB ($p = 0.002$) and ADHD group had higher rates of familial psychiatric history than TC (odds ratio, 8.76; 95 % confidence interval, 1.69 to 45.45). Delay in first-word output tended to be frequent in the ADHD group than in the SIB.

Conclusion: These findings suggest that among perinatal and developmental factors, maternal stress during pregnancy contribute to development of ADHD. Future prospective study is needed to identify the causal relationship between perinatal risk factors and development of ADHD.

PS-078

Preterm birth and attention deficit hyperactivity disorder: a case report

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Introduction: In Spain recent studies indicate an increase of up to 200 % of very preterm birth (VP; <28 weeks or low birth weight

<1500 g) in the last 20 years. The low attention and hyperactivity are major morbidities associated with moderately preterm and VP. Detection with the start of school age supposed delay in social, psychological and intellectual development and may have consequences for their transition to adulthood.

Objectives: Presenting a case and reviewing the literature to summarize the available information to date on pathogenesis, course and detection of attention deficit hyperactivity disorder (ADHD) in preterm birth.

Methodology: A case report of a patient born alive at 27 months of gestational age and weight 745 g. Periventricular cerebral delayed myelination and decrease overall volume were found. The typical lesions of periventricular leukomalacia were not found in magnetic resonance imaging (MRI). At 36 months old, neurodevelopmental was determined using the McCarthy Scales of Children's Abilities (MSCA) and an MRI. At 8 years of age the patient starts disruptive behavior, self-aggressiveness, poor school performance and social problems requiring the attention of psychiatric consultations and drug therapy. 253 articles were reviewed in PubMed using the terms "premature birth", "comorbidity premature birth", "cerebral palsy", "ADHD detection" and "ADHD".

Results: Few studies work about early detection of ADHD in VP. Some studies show differences preattentive, attentional and frontal lobe dysfunction in preterm births and these attentional disturbances may manifest as ADHD1. In our patient the studies showed good cognitive development for learning, and normalization of brain myelination at 3 years old. Diagnosis was established according to DSM V criteria; Attention deficit hyperactivity disorder predominantly inattentive [314.00]. The behavior and attention improved after 6 months of treatment with methylphenidate and counseling.

Conclusions: There is evidence supporting the close monitoring of this population during early and middle childhood with a focus on attention functioning. Is very important identify at preschool age early precursors of low attention and hyperactivity in moderately and very preterm children, but it is unclear how to do it. Further studies are needed in this regard.

Keywords: Attention-Deficit/Hyperactivity Disorder (ADHD); Preterm birth.

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PS-079

Prevalence and clinical correlates of preterm birth in patients with autism spectrum disorder (ASD)

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Background: Prevalence of preterm birth (PTB) is increasing in most countries (Blencowe et al. 2013). In Spain, 5.35 % of all babies, born before 37 weeks of pregnancy. Recent studies have identified an increased prevalence of social and communication difficulties and autism spectrum disorder (ASD) symptoms in PTB population (Johnson et al. 2014). However, data on clinical particularities of ASD with history of PTB is still sparse.

Objectives: We aimed to study the prevalence and clinical correlates of prematurity in a cohort of patients with ASD diagnosis.

Methods: Participants consecutively referred to an ASD specialized outpatient clinic between January 2012 and June 2014 and meeting ASD criteria (DSM-IV-TR) comprised the study sample. ASD diagnosis was based on best clinical judgment of experienced child developmental psychiatrists. ADI-R and ADOS interviews were used when clinicians

deemed it necessary. Demographic, obstetrical and clinical data were collected as part of the intake visit, using a locally devised questionnaire. Prematurity (PTB) was defined as being born before week 37 of pregnancy, and very early preterm birth (VPTB) as before week 26. We compared demographic and clinical features (syndromic autism (i.e. secondary to an existing condition caused by a well-known genetic variant), comorbid ADHD, other psychiatric comorbidities, mental retardation and epilepsy) between patients with and without history of PTB. All statistical analyses were performed using SAS (9.0).

Results: 402 patients (mean age: 8 ± 3.9 , [2–48] years old; 19.7 % female) were included in the study. 13.94 % (n=56) met criteria for PTB, and nearly 1 % (n=4) for VPTB. 30.36 % of ASD patients with positive history of PTB were females, as compared with 17.16 % in the group without PTB ($p = 0.06$). No significant differences were found between the group of patients with and without PTB in rates of comorbidity with ADHD or other psychiatric diagnoses, mental retardation or epilepsy. Within patients with ASD, patients with positive history of PTB presented more frequently syndromic autism than patients without PTB (20 vs 10.2 %; $p < 0.05$).

Conclusions: There is a high prevalence of preterm birth in ASD population. In addition, our results suggest that ASD population with history of PTB could present a distinct clinical phenotype, which is related with a higher proportion of secondary autism. Future studies should investigate the association between prematurity and genetic variants related to ASD, and the implication of this relation in ASD pathogenesis.

PS-080

Prevalence and clinical profile of patients with autistic spectrum disorder (ASD) diagnosis

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In the last decade, an increase in the diagnosis of patients with Autistic Spectrum Disorders (ASD) has been detected. This increase in prevalence can be explained by a raise in incidence, better detection procedures, a widening of the clinical criteria considered clinically significant, or a combination of all these factors.

The object of this study is to estimate the prevalence of the diagnosis within the clinical sample attended at the Child and Adolescent Mental Health Centre in Mollet, to observe the clinical variability of these cases and the possible comorbidities that may worsen the prognosis in these patients. In order to do this, a revision of clinical records of all cases with the diagnosis has been carried out, counting as variables age, gender, family history, comorbid mental disorders (in both axis I and II) and pharmacological treatment.

Preliminary results show that patients with ASD diagnosis represent more than 12 % of all the cases attended in our Centre, 29 % of which had associated cognitive deficits, and 55 % require treatment with psychopharmacs (namely atypical antipsychotics and psychostimulants). 90 % of them were males and 36 % had a family history of mental disorder.

Keywords: Autistic Spectrum Disorders, Prevalence, Comorbidity, Psychopharmacs, Community mental health.

PS-081

Pro-ana & mia internet phenomenon

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Objective: Analyze the content of web pages, Pro-Anorexia y bulimia Nervosa.

Method: We did a Google search, using the keywords “pro ana”. We obtained 19 million results and the first five links were analyzed.

Results: We found the following types of websites: Blogs, links in facebook, wikipedia and forums.

Most of web pages contained:

- Reasons to become Ana
- Rules (Ana is a lifestyle not a disease. With Ana’s help we can become perfect, successful, beautiful and weightless; Eat in front of a mirror, naked if possible. If you can’t, carry a picture of yourself in a revealing outfit and look at it when you want to eat. When you have cravings pinch your fat and look at your problem areas;
- Quotes (Ask me to show you perfect and I will show you a thin person; Stay thin and you’ll always win;)
- Admitted Anorexics (Angelina Jolie, Nicole Richie, Victoria Beckham, ...).
- Diets & Food Advice
- Testimonies (Diary of an Anorexic)
- Survey of how many kilos you lose, (How many kilos are you planning to lose this year)
- Lyrics
- Decalogue
- Pseudo scientific explanations of the body (consequences of overweight)

Conclusion: Names like Ana and Mia are popularly used to refer to the Anorexia and bulimia. Generally the people that use these terms, don’t actually suffer from the disease, they are just the people who think eating disorders are a lifestyle or a choice.

On the Internet, the “Pro-Ana & Mia” phenomenon contributes significantly to disguise these serious diseases as a way of life ideal role. The positive values with which they are associated (beauty, perfection, effort, and overcoming) coupled with positive reinforcement, derived from belonging to a group (identity, companionship and support), are a great attraction for young unsafe and vulnerable, who are at a critical stage of development.

All revised pages show “slim” appearance as a symbol of perfection, happiness and success in life. Being able to control hunger, caloric intake and the body itself becomes the only way to achieve it.

It is likely that patients with eating disorder have belonged to a greater or lesser degree of this social phenomenon, which since its inception in 2004 has not stopped growing. Therefore we consider it important to know and include this phenomenon within the therapeutic strategy focused on this complicated and cruel disease.

PS-082

Prosocial behavior mediates the association between ADHD and peer problems

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Introduction: Children and adolescents with ADHD have more peer problems than normal controls. (1) Children with ADHD show high rates of negative and uncooperative behaviors. (2) In normal

population, the more positive social behavior (prosocial behavior), the better peer relationship. (3) However, this is not so clear in ADHD population 1, 4, 5.

Our aim was to determine the role of prosocial behaviors on peer problems reported in children and adolescents with ADHD.

Methods: 475 children and adolescents were recruited at Child and Adolescent Mental Health Services at the Fundación Jiménez Díaz Hospital (Madrid) from January 1st 2011 to August 31st 2013. A positive ADHD diagnosis was based on the ADHD RS-IV. The parent version of the Strengths and Difficulties Questionnaire was used to measure peer problems and prosocial behavior. A study of mediation applying a general linear model analysis was conducted.

Results: 269 children and adolescents were categorized as ADHD subjects. Parents of ADHD subjects reported significantly greater peer problems than parents of non-ADHD subjects. Prosocial behavior mediated the relationship between peer problems and ADHD1.

Conclusions: Since children and adolescents with ADHD have substantial peer problems and prosocial behavior appears to mediate this relationship, improving social skills could be incorporated as an important tool in the treatment of ADHD patients.

References

1. Andrade BF, Tannock R (2013) The direct effects of inattention and hyperactivity/impulsivity on peer problems and mediating roles of prosocial and conduct problem behaviors in a community sample of children. *J Atten Disord* 17(8):670
2. Clark ML, Cheyne JA, Cunningham CE, Siegel LS (1988) Dyadic peer interaction and task orientation in attention-deficit-disordered children. *J Abnorm Child Psychol* 16(1):1–15
3. Newcomb AF, Bukowski WM, Pattee L (1993) Children’s peer relations: a meta-analytic review of popular, rejected, neglected, controversial, and average sociometric status. *Psychol Bull* 113(1):99
4. Paap M, Haraldsen IR, Breivik K, Butcher PR, Hellem FM, Stormark KM (2012) The Link between Peer Relations, Prosocial Behavior, and ODD/ADHD Symptoms in 7–9-Year-Old Children. *Psychiatry J* 2013
5. Blachman DR, Hinshaw SP (2002) Patterns of friendship among girls with and without attention-deficit/hyperactivity disorder. *J Abnorm Child Psychol* 30(6):625–640

PS-083

Psychiatric disorders in pediatric congenital heart disease

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Objectives: To establish the prevalence of psychiatric disorders in children and adolescents between 6 and 18 years with a of congenital heart disease in our population and the most common psychiatric disorders we study a sample that we can recruited until at present in the last 2 years.

Methods: Cross sectional study of children and adolescents treated for congenital heart disease unit (CCU) of our Hospital. Previously we proceeded to the appropriate informed consent. So after a first open visit with usual anamnesis we used clinical assessment and implementation of K-SADS-PL; Conner’s RS; CBCL; WISC-IV, CMAS-R, CDI; PROLEC RT SE.

Results: At present he have a sample of 50 cases which initial results are presented.

Predominantly women and mean age of 12.

Congenital heart disease is the most represented based stenosis and nearly half still continued drug treatment.

Present some results of an average mean IQ although paradoxically predominantly associated with poor school performance.

Psychiatric disorders occur in over 70 % of the studied cases fulfilling DSM diagnostic criteria. Stressing ADHD: more than 40 %.

Psychiatric disorders are not less than 30 %.

Is striking the low prevalence of depressive disorders as well as other way the high level to somatic complaints anxiety disorders.

Conclusions: The results confirm the high prevalence reported in the literature highlighting ADHD. Aspect that we consider very important for being a treatable and modifiable cause disorders likely poor school performance often associated and significant global impact.

References

Gastaminza X, Avella-García CB, Rubio B, Herreros O, Vacas R, Cornella y MD Mojarro-Práxedes J (2014) Enfermedades cardiológicas. In: En B Rubio y X Gastaminza (ed) Paidopsiquiatría psicósomática. La interconsulta y la psiquiatría de enlace en Pediatría. 1ª ed. Editorial Selene. Las Rozas Madrid, pp 171–187. ISBN 978-84-697-0810-1

García ACB, Saavedra Inostroza CA, Cows R, Gastaminza X, Herreros O (2013) Psychiatric disorders in children and adolescents with congenital heart disease. *J Child Adolesc Psychiatry* 30(4):7–18

García ACB, Saavedra Inostroza CA, Gastaminza X, Herreros O, Vacas R, Rubio Girona BJ (2013) Psychiatric disorders in children and adolescents with congenital heart disease. *J Child Adolesc Psychiatry Aepnya Granada* 30(2):114–116

PS-084

Psychopathic traits in adolescents with conduct disorder

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Introduction: The presence of psychopathic traits in adolescents with conduct disorder may influence the frequency and severity of deviant/delinquent behavior, and their importance in distinguishing serious and persistent antisocial youths has been gaining increasing support. Psychopathic traits are described as having an important biological basis, and young people who present them seem to have a worse response to psychotherapeutic options. The assessment of psychopathic traits (lack of empathy, lack of guilt, shallow emotions, deceitfulness) may allow the clinicians to determine a subgroup in patients with Conduct Disorder with more dangerous and aggressive behavior and poorer prognosis, with different implications in treatment options.

Objectives: The authors aim to determine the prevalence of psychopathic traits in a clinical sample of patients with conduct disorder, and to evaluate the correlation between the frequency and nature of delinquent acts (severity of antisocial behavior) committed by patients and the presence of psychopathic traits.

Methods: We will measure psychopathic traits and deviant behavior in a 2 year clinical and convenience sample, using the Antisocial Process Screening Device-Self Report (Frick and Hare 2001) and the Self—Reported Delinquency Scale (Carroll et al. 1996). The sample is on recruitment.

Results: The sample is on recruitment, so the results are to determine.

Conclusions: We predict that the presence of psychopathic traits will be correlated with more frequent and severe deviant/delinquent behavior. We hope to confirm in a clinical sample the relation between psychopathic traits and deviant/delinquent behavior in adolescents

with Conduct Disorder. We hope that this findings can help clinicians to improve diagnostic and treatment strategies in this group of diseases.

PS-085

Psychosocial risk factors and ADHD

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Introduction: ADHD is a neurodevelopmental disorder affecting 5 to 10 % of children. The etiology of ADHD is multifactorial with a strong genetic component. Environmental risks are thought to play an important role, specially in those periods of development when brain is more vulnerable to insult. Prenatal exposure to toxins or drugs, pregnancy complications, low socioeconomic status or psychosocial adversities have been identified as risk factors of ADHD in a large number of studies.

Objective and methods: The purpose of this work is to investigate these environmental risk factors in out patients, in particular psychosocial risk factor.

We reviewed all the patients between 6 and 14 years old in a period of 6 months (March–August 2014) with a previous ADHD diagnostic and investigate for environmental risk factors of ADHD using the Clinical History.

Conclusions: Psychosocial risk factors is a large group of different adverse situations, and they are present in an elevated number of our patients. These risk factors are related with more severity of symptoms, and poor prognosis. Identify and ameliorate psychosocial risk factors will provide a better outcome for these children.

References

American Psychiatric Association (2002) DSM-IV-TR Manual Diagnóstico y Estadístico de los Trastornos Mentales. Barcelona: Masson

Froehlich TE, Anixt JS, Loe IM, Chirdkiatgumchai V, Kuan L, Gilman RC (2011) Update on environmental risk factors for attention-deficit/hyperactivity disorder. *Curr Psychiatry Rep* 13(5):333–44

Thapar A, Cooper M, Eyre O, Langley K (2013) What have we learnt about the causes of ADHD? *J Child Psychol Psychiatry* 54(1):3–16

Galéra C, Côté SM, Bouvard MP, Pingault JB, Melchior M, Michel G, Boivin M, Tremblay RE (2011) Early risk factors for hyperactivity-impulsivity and inattention trajectories from age 17 months to 8 years. *Arch Gen Psychiatry* 68(12):1267–75

Lindblad F, Ringbäck Weitof G, Hjern A (2011) Maternal and paternal psychopathology increases risk of offspring ADHD equally. *Epidemiol Psychiatr Sci* 20(4):367–72

PS-086

Psychotic symptoms in adolescents with eating disorders. Report of three cases

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Psychotic symptoms in adolescents with eating disorders. Report of three cases.

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Keywords: Anorexia Nervosa, Bulimia Nervosa, Hallucination, Psychosis.

Abstract:

Eating disorders are some of the most prevalent disorders in adolescence, often taking a chronic and disabling course. They are associated with high and sometimes life-threatening medical and psychiatric assessment.

The patients are often obsessed by their body image and usually perceive their self as being overweight, when the reality is usually just the opposite.

Recently there are some cases published in which patients diagnosed of Eating Disorders describe auditory hallucinations.

The relationship between Eating Disorders, and psychosis has long been a subject for debate and has been conceptualized in different ways.

One of these has been the study of the disorder's evolution whereby some studies have suggested that anorexic symptoms might be a prodrome of psychosis.

Or, from the psychological point of view, psychotic symptoms have been related to the psychopathological phenomenon of dissociation. The extreme symptom within this spectrum would be psychotic symptoms.

Since these patients does not have a realistic understanding of their condition which is undoubtedly ill and their own body perception is skewed, this disorder is extremely difficult to treat.

Three cases of adolescents affected by eating disorders who present psychotic symptoms are described. We discussed the main eating disorder and whether psychotic symptoms could be related to severity of Eating Disorders describing also the use of Aripiprazole in such a severe clinical condition.

At the end of 6 months period of a psychological treatment which was combined with psychopharmacotherapy, the patients exhibited no psychotic symptomatology and a stable clinical remission of the illness was achieved.

The use of this drug was found to be effective to reduce psychotic symptoms and to improve compliance to treatments.

Given the high difficulty of treating adolescents with eating disorders, it is important to identify the presence of psychotic symptoms in order to make optimal treatment.

Studies with larger numbers of patients are required to test for statistical efficacy of antipsychotics in these patients.

PS-087

Psychotropic prescribing in young people with ADHD in the UK clinical practice research datalink: 2005–2014

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Background: In the UK, ADHD medication is now frequently prescribed under shared care arrangements between specialist and primary care. Past studies of ADHD prescribing in primary care reported highest rates of medication cessation amongst 16 and 17 year olds with ADHD, despite up to 60 % continuing to experience symptoms into adulthood. Understanding of the impact of ADHD and its associated comorbidities has improved over time, which is likely to have led to an increase in recognition and active management. Examining more recent trends in prescribing for this group is

therefore essential to support service planning and improve outcomes over the vulnerable transition period from child to adult services.

Aims: To describe the prevalence of primary care prescribing of ADHD and other psychotropic medication from 2005–2014 in a cohort of young people with ADHD aged 10 to 20 years at baseline.

Methods: This analysis used the Clinical Practice Research Datalink, a large UK database, to obtain primary care prescribing records of patients who had an ADHD medical code during the study period and were aged between 10 and 20 years in 2005. We describe the prevalence of prescribing of drugs for ADHD by age band, with 95 % confidence intervals. We also describe prescribing of other psychotropic medications (including antidepressants, anxiolytics and antipsychotics).

Results: 10,406 ADHD patients were included (83.6 % male), with 66 % having follow-up data for 5 or more years. Amongst 15/16 year olds, prevalence of prescribing of ADHD medication was 37.8 % (95 % CI: 36.6–38.9 %) whereas in the 17/18 age band less than a quarter had a prescription (23.7 %, 95 % CI: 22.7–24.6 %). The lowest prescription prevalence was in the 21/22 age band (14.2 %, 95 % CI: 12.9–15.4 %). In contrast, prescribing of other psychotropics rose with increasing age. At the age of 16/17 4.2 % (95 % CI: 3.7–4.7 %) had a prescription, rising to 6.6 % (95 % CI: 6.0–7.3 %) amongst 18/19 year olds and 8.7 % (95 % CI: 7.8–9.5 %) in the 20/21 age band.

Discussion: Although new UK guidelines were released in 2008, results indicate that young people may still be experiencing premature cessation of medication. The corresponding rise in other psychotropic prescriptions also raises the question of whether substitution is taking place, which is being explored in current work. Despite limitations (e.g. capturing only primary care prescriptions), taken as a whole, this study supports the case for further review of training and commissioning to optimise ADHD management over the transition period and beyond.

PS-088

Reducing aggressive behaviour by targeting social information processing in referred boys: an implicit intervention

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Childhood aggression is suggested to be the best-known predictor of (future) social adjustment difficulties. This study investigates the effectiveness of an implicit intervention to reduce aggressive behaviour, in boys who are referred for their behavioural problems, by targeting two deviations in social information processing. First, research shows that aggressive boys have a tendency to interpret ambiguous social cues as more hostile. Second, aggressive boys who have heightened scores on callous-unemotional traits appear to have problems with recognizing fearful expressions. This training will thus target on reducing hostile interpretation of ambiguous facial expressions, as well as increasing recognition of fearful facial expressions. We conducted a pilot in 67 boys ages 9 to 14 to see whether a computer training could reduce hostile intent attribution. The boys were randomly assigned to the intervention and an active control group. Participants received the training for 5 consecutive days, and teachers reported on the participants' (reactive and proactive) aggressive behaviour pre- and post-test. The training included pictures from morphing continua ranging from 'happy' to 'angry', with ambiguous pictures in between, of which participants had to judge on the emotional expression showed. Intervention consisted of feedback based on the boys' initial levels of 'angry' responses. The training significantly reduced hostile intent attribution: In general, boys' interpretation shifted 3 pictures in the 15-picture continua. We did not find an effect on aggressive behaviour yet. In the current study we will test the same kind of

computer training with morphing continua ranging from ‘happy’ to ‘angry’, but this time morphing continua ranging from ‘angry’ to ‘fearful’ will be added. Feedback will consist of discouragement of ‘angry’ responses, and encouragement of ‘happy’ and ‘fearful’ responses. We expect the training to be effective in reducing hostile intent attribution, and increasing recognition of fear. Besides this effect on social information processing, we expect the training to reduce related aggressive behaviour. The pilot already shows that effects can be reached with a seemingly small manipulation in a very limited time span. This training can be of additional value for bigger, already existing, interventions.

Keywords: Social information processing; Hostile intent attribution; Aggressive behaviour; Facial expressions; Implicit training.

PS-089

Relation between salivary cortisol level and cognitive impairment in children with attention deficit hyperactivity disorder in a sample of Egyptian children

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Relation between Salivary Cortisol Level and cognitive impairment in children with Attention Deficit Hyperactivity Disorder

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Objectives: Attention-deficit/hyperactivity disorder is one of the most common and impairing child neuropsychiatric disorders. The most prevalent clinical view of ADHD maintains that the central deficits of the disorder are the inability to sustain attention and symptoms of hyperactivity and impulsivity characterized by inattention, span of attention grow downwards, hyperactivity, impulsivity, and only recently, executive function deficits have been implicated as a core deficit of ADHD.

Several studies suggested that cortisol level influence the development and functioning of the brain in children and it is implicated in a variety of processes including memory and attention. This study was done to investigate the relation between cortisol level in ADHD children and their cognitive function profile.

Subjects and methods: Descriptive cross-Sectional study, held in Suez Canal University Hospital in Ismailia, participants recruited from attendance of the childhood and adolescent psychiatry clinic. The study included 2 groups (74 children), ADHD group (diagnosis set upon DSM-IV TR through a structured clinical interview), composed of 43 children, (pure ADHD children with no co-morbid condition) and Control group composed of 31 typically developing children, participated voluntarily in this study. Age study ranges from 6–12 years, both sexes were included. Early morning awakening salivary cortisol levels were collected, on 2 different days, 2 months apart. Stanford-Binet intelligence test 4th edition (SB-4), Wisconsin card sorting test (WCST), Conner’ test, child behavioral checklist (CBCL), were performed to all participants.

Results:

- Children with ADHD had significant lower cortisol levels at awakening $P < 0.01$.
- Comparison shows that there was statistically significant difference ($p < 0.05$) between mean scores of total score and subdomain scores of Stanford-Binet test and Wisconsin card sorting test (total number of errors, perseverative errors) between ADHD children and comparison group, and that these results are positively correlated with decrease in mean cortisol awakening response.

Conclusion: There are significant associations between salivary cortisol and cognitive and executive function impairment in children with attention deficit hyperactivity disorder (ADHD).

PS-090

Relations between specific language impairment and specific learning disorder in Italian sample

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Relations between Specific Language Impairment (SLI) and Specific Learning Disorder (SLD) have long been the subject of study and of a heated debate about the direction and the meaning of their frequent association. The DSM5 confirms this relationship, while not indicating the direction and, in Italy, the National Guidelines System Institute of Health recommended “... to conduct further studies aimed to deepen etiological relations between dyslexia and SLI”. Our aim is to compare children diagnosed with SLI in preschool age, in follow-up (SLI), with subjects who receive a diagnosis of SLD in Primary School (SLD), without previous consultations for neuropsychiatric disorders. The Italian sample, selected according to the criteria defined by the ICD-10, using standardized tests, consists of 62 subjects (25 SLI and 37 SLD) attending the third year of primary school. In both groups it is detected familiarity for neuropsychological disorders; about half of the subjects in both groups presented difficulties in the praxic development; 43 % of SLD presented slowed, but not atypical, language development. The share of SLI that develops a reading/writing disorder varies from 64 to 76 %, based on the threshold used for the diagnosis (1.5 or 2 sd). The comparison of the two groups shows that SLI have more quick reading rate and tend to be more accurate than SLD, but their understanding tends to be lower; both groups have relevant and homogeneous deficit in writing. Language difficulties (exitedated or not in SLI diagnosis) are confirmed to be a risk factor for the subsequent development of a SLD. The evolution of a SLI in SLD is however not a fixed path and the type of difficulties in reading and writing in the two groups appear not entirely overlapped.

PS-091

Relationship between anger, suicidal ideation and depression in Korean adolescents

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The purpose of this study identify relationship between anger, suicidal ideation and depression in Korean adolescents.

From June to October 2014, survey data from 395 adolescents were collected by using the Korean version of State Trait Anger Expression Inventory, Kovacs’ Children’s Depression Inventory and Korean Child Behavior Checklist.

Girls are having more suicidal ideation than boys ($p < 0.01$). The group with suicidal ideation showed significantly higher average score in state anger, trait anger, anger out and anger control ($p < 0.01$). The group with depression showed lower anger control (OR = 0.89, $p = 0.033$) and higher anger in (R = 1.90, $p = 0.000$).

These findings suggests that anger is closely related with depression and suicidal ideation in Korean adolescents. School-based programs which alleviate anger may be needed to decrease suicidal ideation and depression among Korean adolescents

PS-092**Risperidone use in children and adolescents with autism spectrum disorders and problematic behavior**

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Introduction: Autism spectrum disorders (ASDs) are neuropsychiatric conditions characterized by marked impairment in social interactions, communication deficits, and restricted/repetitive patterns of behaviors. The term “spectrum” includes a wide range of these symptoms and impaired functioning of the patient. ASDs are associated with problematic behaviors, like aggression, hyperactivity, irritability, repetitive behaviors or stereotypies. Atypical antipsychotics are used for treatment some of these symptoms, like aggressive behavior, self injury and irritability.

Methods: In our study we were using risperidone to treat disruptive behaviors and self-injury in children and adolescents with ASD. We have analyzed a group of nineteen children and adolescents with ASD and problematic behavior. The group consisted of 15 males and 4 females, of the age between seven and sixteen. Diagnoses were made according to the ICD-10 criteria. All of them have aggressive behavior and seven of them also have self injury. They have been treated with risperidone 0.5–2.5 mg per day. Duration of the treatment was between three and 4 months.

Results: As demonstrated by the clinical observation as well as Aberrant Behavior Checklist (ABC) risperidone has significantly reduced symptoms of problematic behavior at all of the patients with ASD. However, some of the patients, six of them (31.5 percent), have significant weight gain. One patient has stopped received risperidone because of this side effect and change with the other antipsychotic drug. Patients with weight gain received higher dose of risperidone.

Conclusion: This study support our clinical experience of mean improvement of problematic behavior patients with ASD (like aggression, self injury and irritability) with risperidone. Our patients are well tolerated low dose of risperidone, but some of them with higher dose of medicine have problem with weight gain. Our conclusion, in small sample, is that for the most children with ASD and irritable, aggressive behavior and self injury risperidone is effective pharmacological treatment.

PS-093**Self-regulation maturing of children with normal development and mental retardation**

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Self-regulation is supposed to be “a key to the life success” (Baumeister 2002). Therefore it is important to study the way of forming of this ability in ontogenesis. The aim of the current research was to investigate the maturing of self-regulation in the age from 7 to 12 years in children with normal development and with mental retardation.

The theoretical concept assumed as a basis of the research was the three-level model of self-regulation introduced by Nikolaeva (1991), including the level of self-regulation of psychic states, the operational and the motivational levels.

The research sample consisted of 39 children with slight mental retardation in the age from 7 to 12 years and 93 their normally developing peers. Diagnostics included Luria’s battery of neuropsychological tests adapted by Semenovich (2002), methods of studying learning motivation by Ginsburg (1996), Louskanova (1996), Grebeniouk (2000) and Markova (1990).

The research has shown that in the case of normal development in the age of 7–8 years the leading level of self-regulation is the level of psychic states. The transfer to the motivational level as the leading one begins in the age of 8–9 years. The results of learning activity of normally developed children in the age of 11–12 years depend of their motivation as contrasted to the age of 7–8 years, when most of the children have high level of learning motivation, but their results depend of the maturing of the self-regulation of psychic states.

In the case of mental retardation the underdeveloped first level of self-regulation negatively effects on the operational level, and therefore maturing of the motivational level also delays.

The statistically significant differences in Mann-Whitney test in self-regulation level between the normally developing children and their peers with mental retardation show that a special intervention course is needed for the latter group to help them to shorten the gap in developing of this ability.

PS-094**Short-time outcome predictors of bipolar disorder type I in children and adolescents**

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Objectives: Cohort researches on youth bipolar disorder are limited. This study aimed to evaluate the 3 and 6 month clinical and demographic outcome predictors (recurrence rate, the rate of hospitalization, severity of illness and recovery rates) in a group of inpatient children and adolescents with type I bipolar disorders.

Method: In a longitudinal and prospective study, 80 youths admitted in the child and adolescent psychiatry ward at Roozbeh hospital were recruited. All the participants were diagnosed as having type I bipolar disorder. These consecutive referrals were evaluated at admission, discharge, and follow-up at 3 and 6 months, using demographic questionnaire, the Kiddie-Schedule for Affective Disorders and Schizophrenia- Present and Lifetime Version-Persian Version (K-SADS-PL-PV), the Young Mania Rating Scale (Y-MRS), the Children Depression Inventory (CDI) for under 16 year-old, the Beck Depression Inventory (BDI) for above 16 year-old, and the Clinical Global Impression (CGI). The Pearson correlation coefficient and multivariate regressions were used for data analysis.

Results: The 6-month follow-up showed that there was a positive correlation between the severity of mania with male gender ($p = 0.01$) and the severity of mania at admission ($p = 0.04$). The rate of recurrence at the 6-month follow-up was correlated ($p = 0.05$, $r = 0.22$) with psychosis at admission. The duration of untreated disorder ($p = 0.03$) had a positive correlation with the severity of global impairment at the 6 month follow-up.

Conclusion: This study confirms the role of some demographic and clinical features in predicting the course of disorder and the youth's response to treatment.

Keywords: Bipolar disorder; Child and adolescent; Outcome; Predictor.

PS-095

Social (pragmatic) communication disorder: clinical predicaments

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Background: The DSM-5 has introduced a new clinical diagnosis, social (pragmatic) communication disorder, for children who do not meet criteria for autism spectrum disorder but who show social communication and pragmatic language impairments. This has raised concern with the diagnosis in its current form, as such impairments are likely to be present in other neurodevelopmental disorders and in language and cognition disorders. It is our aim to outline the challenges evoked in clinical conceptualization and assessment.

Method: Selective review of the evidence was conducted with a computerized search on PubMed (MEDLINE). Assessment approaches and clinical implications are discussed and illustrated with a clinical case.

Results: This clinical case portrays well the clinical assessment and diagnostic challenges posed by social (pragmatic) communication impairments. Once pragmatic deficits are strongly associated with a number of clinical groups and developmental concerns, assessment measures are unlikely to help in the diagnosis as they lack sensitivity and specificity. The broad dimensional view of such impairments and the requirement of fulfillment of all four specified criteria may also preclude the diagnosis in young people. Furthermore, although intimately related, the impairments of pragmatics and social communication are not necessarily the same and both are necessary for the diagnosis.

Conclusions: Existing evidence supports the view of social and pragmatic communication impairments as symptoms rather than a diagnostic entity. Clinical research in the future must develop valid assessment tools bearing this new entity in mind, and compare pragmatic profiles across different neurodevelopmental disorders in order to establish the validity of the diagnosis. Moreover, developmental trajectories and etiology studies may improve consistency as well as advance our understanding of the diagnosis.

Keywords: Social communication; Pragmatic disorder; Assessment; Child psychiatry.

PS-096

Social skills' profile of children diagnosed with Asperger syndrome or high functioning autism attended in a mental health centre of Gran Canaria

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The concept of "Social Skills" refers to various specific learned behaviors that result in positive social interactions and include verbal and

nonverbal aspects, all necessary for an effective interpersonal communication. On the other hand, "Social Competence" is an evaluation term which tests the performance of a subject in social tasks, based on the outcome of the trial by social agents according to certain criteria.

Children affected with High Functioning Autism or Asperger Syndrome exhibit as the central common deficit, among others, disturbances in terms of social skills, presented since early childhood. Despite they often are aware of their deficits and motivated to interact with peers they have great difficulty in their performance.

The negative impact they have on different areas of individual development, instead of tending to vanish, persists until adulthood. Research has highlighted that mere exposure to peer group and social interaction situations are insufficient for the development of social skills age-appropriate, so developing interventions to promote social competence becomes an intervention of great value, in order to improve their lives and reduce long-term social costs and suffering. But teaching social skills is a difficult task, requiring an evaluation and classification of specific social skills deficits presented by the subject, in order to develop an appropriate intervention.

Children diagnosed with Asperger Syndrome or High Functioning Autism attended in our Mental Health Centre were recruited, ranging in age from 7 to 18 years old. A test battery was administered to participants and relatives (parents) in order to get a measure of their general and specific yield in social skills.

Thus, the social skill's profile of the child population affected with Asperger Syndrome or High Functioning Autism who are attended in a Mental Health Unit of the Public Health of Gran Canaria is shown, and possible associations with clinical characteristics.

PS-097

Specific learning disorders: long term prognosis of an Italian sample

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Developmental Specific Learning Disorders (SLD) show strong persistence across the school years. Some adults retain a marked dyslexia, others may be more compensated and, while showing some deficits in the automation of processes involved, are able to tackle everyday tasks using alternative strategies. The difficulties resurface when more specific tests are administered or require a higher cognitive load and a more efficient level of automation. With respect to the Italian population there are only two systematic studies on the evolution of reading skills in subjects with Dyslexia become young adults. The available data show that the typical neuropsychological deficits related to reading skills tend to persist, as well as variables related to broader cognitive and learning skills, allowing to differentiate between subjects with and without dyslexia. The SLD has a major impact both at the individual level (frequent lowering of curricular level achieved and/or premature school drop-out) and at the social level (reducing the realization of social and employment potential of the individual). This work aims to add further evidence on the outcome of the disorder in young adults. 30 Subjects, with SLD diagnosis made before age 13, were recruited and revalued at the end of Second Grade Secondary School, using a battery of standardized tests and a questionnaire on clinical and educational path. The presence of the disorder appears to affect the choice of the type of high school and determine a laborious and discontinuous schooling, although almost all subjects have received sufficient therapeutic and educational support. Faced with preserved cognitive skills, evaluation of school abilities shows how the specific difficulties persist, particularly in speed of reading text, and are associated with insufficient

metacognitive strategies and skills, that affect negatively the use of written code as an expressing, learning and thinking tool.

PS-098

Stability of psychiatric diagnosis in a child psychiatry liaison program

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Objectives: To assess the stability of diagnoses or suspicion of psychopathology made by paediatricians, once the psychiatrist assessment has been made in a liaison child psychiatry unit in a general hospital.

Materials and methods: We made a descriptive study collecting data from 79 patients who were cited and evaluated along 2013 and 2014 in a child psychiatric liaison program in Hospital Clínico San Carlos de Madrid, referred from other specialties. As a liaison psychiatry program inside a General Hospital, appointment availability of new patients from primary care is limited to half of the total. Analyzed variables are age, sex, service of provenance, reason for referral and diagnosis after the psychiatric assessment.

Results: Of those who were referred for suspected ADHD or confirmed ADHD (15), 12 were diagnosed ADHD, 1 was diagnosed with Bipolar Disorder, 1 was diagnosed with anxiety disorder and 1 was not diagnosed with any disease. Among this group, 80 % were referred by pediatric neurologist and 20 % were referred by primary care. Of those who were referred for behavioral disorder, 6 were not diagnosed with any psychiatric disorder, 3 were diagnosed with intellectual disability, 2 ODD, 2 Adjustment Disorder, 2 mixed disorder of behaviour and emotions, 1 separation anxiety disorder and 1 Gilles de la Tourette. Of those who were referred for abdominal pain, 3 were not diagnosed with any psychiatric pathology, 3 were diagnosed with anxiety, 2 were diagnosed with emotional disorder and 1 with encopresis.

Conclusions:

- Patients referred with suspected or confirmed ADHD, mainly from pediatric neurologist, maintain this diagnosis in the 80 % of the cases. The detection of this disorder is correctly carried out outside the psychiatric field in our sample
- Among patients referred for abdominal pain, psychopathology was found in most of them, especially internalizing disorders.
- There is a high percentage of the sample of patients (16.5 %) that have not received any psychiatric diagnosis. This is even higher in the subgroup of patients that were referred because of “behavioral disorders” (30 %). In addition we find in this group multiple and different diagnoses after the psychiatrist evaluation. So it seems to be too inespecific and poorly stable as a referral item.

PS-099

Strengths, difficulties and defenses in offenders adolescents: considerations and bases for intervention

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Adolescence is a period of functioning characterized by the transition between childhood and adulthood, the removal of identificatory figures,

group trend and the search for identity, understood as a condition of being itself. However adolescents antisocial behaviors can present difficulties from the emotional development, which can lead to antisocial behavior in adults. The delinquency can be understood as the result of emotional deprivation and lack of environmental supplies to deal with the lack, and at the same time can reveal the hope of the subject to retake the stages of life when there were reliability at home and in good object. The aim of the study was to present and understand the strengths and weaknesses of adolescent offenders who meet educational socio measure. And identify the nature of defense mechanisms employed as a way of them deal with the difficulties they face. The sample was composed 50 juvenile delinquents male, 13–18 years of age assisted by NGOs (group 1). And 50 teenagers controls from public schools (group 2). The instruments used were interviews with teens to know the history of life and how they perceive themselves and their environment and the tools: Defense Style Questionnaire (DSQ-40) Is a self report questionnaire designed to measure manifestations aware of defense mechanisms, techniques used by the ego to deal with anxiety and resolve conflicts is composed of 40 items representative of twenty types of defenses, organized into three factors: a maturation factor, a neurotic factor and an immature factor. Strengths and Difficulties Questionnaire (SDQ) that screens child mental health problems, comprising a total of 25 items divided in five subscales: emotional problems, hyperactivity, relationship, conduct and pro-social behavior, with five items in each subscale. Data were analyzed statistically by SPSS program and made comparisons between the two groups, and the results in the instruments. As results were found: Group 1—more emotional symptoms, conduct problems, difficulties in interpersonal relationships. As defenses were found more lack of defenses matures, as a mechanisms to preserve the psyche of the subject of the frustrations of middle and absence of continence of their own aggression. And more immature defenses. Thus, here was more difficulties in offenders adolescents, and the need for proper and early intervention for them ad hei family.

Keywords: Adolescence, Conduct and oppositional defiant disorder, Defense Style Questionnaire (DSQ-40), Strengths and Difficulties Questionnaire (SDQ).

PS-100

Systematic literature review and mixed treatment comparison of guanfacine extended release (GXR) versus other pharmacotherapies in children and adolescents with attention deficit/hyperactivity disorder (ADHD)

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Objectives: This study compared the clinical efficacy of ADHD pharmacotherapy in children and adolescents 6–17 years of age.

Methods: A systematic literature review was conducted according to National Institute for Health and Care Excellence guidelines to identify randomized controlled trials (RCTs) of GXR, atomoxetine (ATX), lisdexamfetamine (LDX) and methylphenidate (MPH) extended release (ER) and immediate release (IR) among children and adolescents with ADHD. A Bayesian mixed treatment comparison was conducted to compare ADHD-rating scale (ADHD-RS-IV) change, clinical global impressions improvement (CGI-I) response (defined as a CGI-I score ≤ 2), all-cause discontinuation and discontinuation due to adverse events (AEs), with meta-regression adjustments permitted by data availability (age and percent female). 95 % credible intervals (CrIs) for treatment effects and the posterior

probability that GXR was more efficacious than each other medication were estimated.

Results: Of 5619 records retrieved, 31 RCTs met the inclusion criteria. Five trials included GXR, 4 included LDX, 18 included ATX, 7 included MPH-ER and 5 included MPH-IR. The mean ADHD-RS-IV score change from baseline and 95 % CrI (active minus placebo) were -8.68 ($-10.63, -6.72$) for GXR, -14.98 ($-17.14, -12.80$) for LDX, -6.88 ($-8.22, -5.49$) for ATX and -9.33 ($-11.63, -7.04$) for MPH-ER. The relative risk and 95 % CrI for CGI-I response (drug vs placebo) were 2.13 (1.68, 2.59) for GXR, 2.93 (2.47, 3.40) for LDX, 2.30 (1.79, 2.81) for MPH-ER, 1.97 (1.43, 2.58) for ATX and 1.66 (1.02, 2.32) for MPH-IR. Among non-stimulants, GXR was more efficacious than ATX when comparing ADHD-RS-IV change (posterior probability 93.91 %) and CGI-I response (posterior probability 71.01 %). The relative risk (vs placebo) and 95 % CrIs for all-cause discontinuation were 0.89 (0.65, 1.17) for GXR, 0.67 (0.46, 0.94) for LDX, 0.91 (0.72, 1.13) for ATX, 0.58 (0.40, 0.81) for MPH-ER and 0.55 (0.24, 1.03) for MPH-IR. For AE-related discontinuation, relative risks (95 % CrIs) were 4.94 (2.00, 10.46) for GXR, 3.50 (1.25, 8.16) for LDX, 2.75 (1.32, 5.21) for ATX, 1.42 (0.48, 3.30) for MPH-ER and 0.89 (0.12, 3.17) for MPH-IR.

Conclusions: In this study, it was found that LDX had greater efficacy compared with GXR, ATX and MPH in the treatment of children and adolescents with ADHD with no overlap in CrIs. Among non-stimulants, GXR had a high probability of being more efficacious than ATX, although their CrIs overlapped. Owing to low rates of AE-related discontinuations, statistical uncertainty was high for this outcome. This study was sponsored by Shire Development LLC, Wayne, PA, USA.

PS-101

Systematic review of avoidant/restrictive food intake disorder in children and adolescents

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Introduction: In May 2013, the American Psychiatric Association (APA), at its annual meeting, presented the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). The DSM-5 includes a large and significant revision of Eating Disorders (ED); among other changes, it includes the Avoidant/Restrictive Food Intake Disorder (ARFID). This type of patient maintains a restrictive diet without other conditions present in Anorexia Nervosa (AN): body image distortion or fear of gaining weight. Patients with ARFID may have nutritional deficiencies, reliance on tube feeding or oral nutritional supplements, food avoidance, loss of appetite, abdominal pain, fear of vomiting and disturbances in psychosocial functioning. **Objective:** This work is a systematic review of ARFID in children and adolescents. The review was carried out in two databases, PubMed and EBSCO, between 2012 and 2014, using the terms: “ARFID” and “children and adolescents”. We found fourteen articles and for this study, use six suited to our objectives: analyze the socio-demographic and psychopathological characteristics (sex, age, duration of illness, comorbidity and body mass index) of this type of patient and compare the differences and similarities with patients diagnosed with AN. **Results:** In three studies that compare ARFID with AN, the results were that children and adolescents with ARFID were younger, had a longer duration of illness before diagnosis and included a greater number of boys than patients with AN. Conversely, these same studies, found that ARFID patients had significant weight loss, malnutrition and food

restrictions as patients with AN. In these three articles, ARFID prevalence was between 12.4 and 22.5 %, they were evaluated among patients with ED and outpatient in different service of mental health. In two descriptive cases studies, ARFID was associated with anxiety disorders, obsessive-compulsive disorder, attention deficit hyperactivity disorder, autism spectrum disorders, pervasive developmental disorder and learning disorders; conversely, ARFID demonstrated less comorbidity with depression.

Conclusions: ARFID patients are significantly different than patients with AN. Because clinical, demographic and treatment characteristics of patients with ARFID may require a more intensive level of care than other ED.

Keywords: Avoidant/Restrictive Food Intake Disorder, Children and adolescents, Anorexia Nervosa, DSM-5.

PS-102

Systematic review of psychological treatments for depression in children below 13 years old

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Objective: To evaluate the efficacy of psychological treatments for depression in pre-adolescent children

Design: Systematic review of studies of psychological interventions to treat depressive disorder in pre-adolescent children (aged up to 12 years old). The primary outcome was level of depressive symptoms. Time frame for the search was up to 1st October 2014.

Data Sources: Studies were found using Medline, PsycINFO, EMBASE and Web of Knowledge databases and selected on several criteria.

Eligibility criteria for selecting studies: Only randomised controlled trials were included. Where individual studies covered a broader age range (usually including adolescents up to age 18 years), authors of those studies were contacted and requested to provide individual patient level data for those aged 12 years and younger.

Results: 2823 abstracts were reviewed and from these, 124 full text articles were reviewed, yielding 7 studies for which we were able to access appropriate data for this review. 5 of these studies evaluated cognitive behaviour therapy (CBT). Combined results from these studies suggest that there is no convincing evidence that CBT is better than no treatment (Standard Mean Difference -0.342 (95% Confidence Interval $-0.961, 0.278$), although the numbers included in trials is relatively small. The evidence for efficacy of family therapy and psychodynamic therapy is even weaker.

Conclusions: There is inadequate and inconclusive evidence for the psychological treatment of depression in children aged 12 years and under. Given the prevalence and significant impact of this disorder, there is an urgent need to establish the efficacy or otherwise of psychological intervention.

Keywords: Children, Depression, Psychological treatment, Systematic review.

PS-103

Tackling teenage in high functioning-adolescents with autism spectrum disorders (HF-ASD): a pilot project in Barcelona

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Background: Adolescence is a difficult period of life, especially for ASD adolescents due their scarce social understanding and difficulties to cope with changes. Discrepancies between socio-emotional and physical development arouse driving to frustration and disturbances in socio-emotional behavior (Ballan 2011; Stokes 2007). Dutch researchers have developed the “Tackling Teenage (TT)”, a program based on previous psycho educative and cognitive models (Hellemans 2007; Sperry and Mesibov 2006) with the aim to improve psychosexual development in ASD adolescents.

Aims of the study:

1. To adapt the TT program to our environment in collaboration with the Rotterdam research team.
2. To replicate the previous positive results in HF-ASD adolescents.

Method: The TT consists of 18-week individual sessions with a trained psychologist. The topics of the TT adapt the psychosexual education and interpersonal abilities to the knowledge levels and functioning of the adolescent. Effects of TT were investigated by comparing the knowledge and skills of the HF-ASD adolescents before (T1) and after the training (T2). Baseline assessment included the ADI-R, WISC-IV or WAIS-III depending on age, the Social Responsiveness Scale (SRS), the Child Behavior Checklist (CBCL) and the Knowledge Test (KT) about human biology. The SRS, the CBCL and the KT were administered again at T2.

Twenty-eight adolescents with DSM-IV diagnosis of HF-ASD and with IQ >80 were recruited and 16 completed the training. All diagnoses were confirmed with ADI-R and clinical consensus of the research team. Ethical board committees of both hospitals authorized the present study.

Results: The 16 adolescents who completed the training had a mean of age of 15, 62 (SD = 1, 31). The SRS mean at baseline was 81, 50 (SD = 26, 59). The CBCL mean total score was of 47, 88 (SD = 21, 39). The KT mean was of 25, 64 (SD = 6, 29). No significant differences were found between the recruited sample and participants (n = 16).

The pre-post analysis showed a significant improvement of knowledge (t = 4, 92; p = 0.000) after intervention but not a significant improvement of social communication deficits (t = 1,981, p = 0.066). No significant differences were found in the total score of the CBCL (p = 0.756) nor in the internalized nor in the externalized (p = 0.786).

Conclusions: These preliminary findings suggest that the TT increases knowledge on sexuality in HF-ASD adolescents.

Keywords: High-Functioning Autism; Adolescence; Sexuality.

PS-104

Temperament profiles in very preterm born children and the possible link with ASD features

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Background: Previous research in cohorts of preterm born children clearly suggests a link between prematurity and autism spectrum disorder (ASD; e.g. Kuban et al. 2009; Wong et al. 2014; Dudova et al. 2014). However, prospective research is considered necessary to understand the developmental pathways through which a substantial subgroup of preterm born children develops ASD. One useful framework that has been suggested for understanding the emergence of ASD in early life, is temperament (Garon et al. 2008). Research

with children with ASD and their high-risk siblings on the one hand points out that clear temperament peculiarities linked with ASD emerge during infancy (e.g. Zwaigenbaum et al. 2005), while studies with preterm born children on the other hand provide inconsistent results considering their temperament profiles (e.g. Larroque et al. 2005).

Objectives: This study aims to compare the early temperament profiles of very preterm born children (PI) with the profiles of their term born counterparts (TI). Among PI, we intend to study to what extent temperament dimensions in the first year of life can predict the emergence of ASD symptomatology at 18 months.

Methods: Data are currently being collected in a prospective follow-up study of PI born before 30 weeks of gestation. Infants are assessed at the (corrected) ages of 5, 10 and 18 months. Their parents are asked to complete the IBQ-R at the ages of 5 and 10 months (Gartstein and Rothbart 2003) while at 18 months, ASD features of PI are examined with the ADOS-Toddler version (Lord et al. 2012). Up till now, valid data of 38 PI and 24 FI have been analysed.

Results: At 5 months, PI were assigned less sadness (p = 0.030), less distress (p = 0.007) and their parents believed PI had a higher rate of recovery after peak distress (p = 0.077), compared to FI. PI also showed less approach towards pleasurable activities at the age of 10 months (p = 0.066). Moreover, preliminary results suggest no significant correlations between temperament constructs in the first year of life and ASD features at 18 months.

Conclusions: In line with results of previously reported studies, no consistent temperament profiles of very preterm born children could be identified. However, some age-related differences with FI could be found, but preliminary results suggest that they are not associated with ASD symptomatology. More detailed results will be presented at the conference.

PS-105

The aberrant behavior checklist: psychometric properties in a neuro-paediatric sample

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Population-based studies have found a high prevalence rate of behaviour problems among children and adolescents with intellectual and developmental disabilities and chronic illnesses. Hence, a screening measure to detect such problems is needed. Few screening measures of behaviour problems have been developed and validated for children and adolescents with such disabilities. This study aimed to investigate the psychometric properties of the Aberrant Behaviour Checklist (ABC) in a neuro-paediatric sample. Participants were 97 children aged 5–17 years (M = 10.70, SD = 3.43) attending an outpatient neuro-paediatric clinic in the specialized health service. They underwent assessment of intellectual level (Wechsler Intelligence Scale for Children-IV) and adaptive level (Vineland Adaptive Behavior Scales-II). Subscale reliability of the ABC (internal consistency) was good (mean coefficient α across ABC subscale was 0.90). The ABC total and subscale scores did not correlate significantly with IQ scores. There were significant small to moderate negative correlations between the ABC total score and the adaptive level (mean coefficient r was -0.39). Twenty-eight percent of the children had an item on the ABC scored as a moderate or a severe problem on one or more scales. It was the items on the hyperactivity, the irritability and the lethargy scales that were most frequently scored as moderate and severe

problems. In conclusion, the ABC shows promising psychometric properties in a neuro-paediatric sample of children and adolescents with neurological and developmental disabilities.

Keywords: Aberrant behavior checklist; Behaviour problems, Developmental disability, Neurological disorders.

PS-106

The effectiveness of a brief behavioural sleep intervention in school aged children with ADHD and comorbid autism spectrum disorder

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Attention Deficit Hyperactivity Disorder (ADHD) and Autism Spectrum Disorder (ASD) frequently co-occur with up to 78 % of children meeting diagnostic criteria for a comorbid ADHD-ASD diagnosis (Holtmann et al. 2007; Keen and Ward 2004). Sleep problems are common in children with ASD and ADHD and impact adversely on child and parent wellbeing. Behavioural sleep interventions have been shown to be effective in improving sleep problems and child behavioural functioning in ASD (Malow et al. 2014) or ADHD (Keshavarzi et al. 2014), however there is a lack of research that has considered whether behavioural sleep interventions improve sleep problems in children with co-morbid ADHD-ASD. This study evaluated the efficacy of a brief behavioural sleep intervention in children with comorbid ADHD-ASD. A subsample of children with ADHD-ASD ($n = 61$; 5–13 years; 89 % male) participating in the Sleeping Sound with ADHD study were included in the current investigation. The subsample comprised of 28 children randomised to the sleep intervention group, while 33 were randomised to usual clinical care. The intervention consisted of two clinical consultations and a follow-up phone call covering sleep hygiene and standardised behavioural strategies targeted at a range of sleep problems (e.g. sleep onset association disorder, delayed sleep phase, limit setting sleep disorder, primary insomnia and night time anxiety). Children with ADHD-ASD who received the behavioural sleep intervention had large improvements in sleep problems and moderate improvements in child behavioural functioning 3 and 6 months post-randomisation. These findings suggest that a brief behavioural sleep intervention can improve sleep problems in children with ADHD-ASD and has positive effects on children's social, emotional and behavioural functioning. Rigorous, controlled trials are now needed with a larger sample to further confirm these findings.

PS-107

The loss

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We review the characteristics of grief in children and adolescents through the case of a 13-year-old girl served in our unit of child and

adolescent mental health after have been derived by gynecology service after several deaths in her family.

We are talking about grief when referring to a person's reaction to the death of a loved one. We refer to the set of phenomenon that humans express in the psychological, biological and social fields after an emotional loss. Grief is an adaptive process, which is to say "we will develop". It's one of the most stressful events in a person's life and each individual needs a variable time for recovery. When we have no enough resources to deal with the loss, as it can occur in the case of children and adolescents, it enters the land of the "complicated mourning" and a specialized psychological care is required.

There are various factor types which predispose to a complicated mourning: 1. Relational (dependency, conflict with the emergence of auto-reproaches...), 2. Circumstantial (youth of the deceased, sudden death, uncertain death by disappearance...), 3. Personal (more complicated in male, any previous physical or mental problems, previous duels unresolved...) and 4. Social (lack of social or familial support, socio-economic level bass...). Special risk cases to a complicated mourning are children and adolescents who lost their father or their mother.

The age in which you can start to talk about grief aroused many controversies between the different authors, from those who deny its existence before adolescence (a minority) to those who observed grief demonstrations from the 6 months of life, since from this age it can be said that child experiences the anguish of separation when the mother is absent.

Our patient is a 13-year-old girl from our consultations who was derived by gynecology service after the death, in the course of a year, of her mother and her older sister, both by ovarian cancer.

Keywords: Grief, Complicated mourning, Adaptive process, Resources, Predisposing factors.

PS-108

The loudness dependence of the auditory evoked potential (LDAEP) in children with attention deficit hyperactivity disorder

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Objectives: The loudness dependence of the auditory evoked potential (LDAEP) has been identified as being inversely associated with central serotonergic activity, with a weak LDAEP reflecting high serotonergic neurotransmission and vice versa. Recent studies suggest that LDAEP is also influenced by dopaminergic transmission. It is known that low serotonergic activity may be related to a dopamine deficit. Evidence shows that Attention deficit hyperactivity disorder (ADHD) symptoms are associated with dopamine dysfunction. The aim of the present study was to determine whether there is an association between the symptom severity and LDAEP in children with ADHD.

Methods: A total of 32 school-aged children (6–12 years old, 29 males and 3 females) with ADHD were enrolled in this study. Severity of symptoms was assessed by using the ADHD rating scale (ARS). To evaluate the LDAEP, the auditory event-related potential was measured before beginning medication. Peak-to-peak N1/P2 amplitudes and current source densities were calculated at five stimulus intensities, and the LDAEP was calculated as the linear-regression slope.

Results: The mean age of subjects was 9.19 ± 1.78 years old and the LDAEP score was 0.80 ± 1.06 (-0.76 – 4.32). Total ARS score was 21.47 ± 10.35 . LDAEP was found to be positively associated with ARS score, after adjusting for age and IQ ($r = 0.451$, $p = 0.024$).

LDAEP was related with score of inattentive symptoms ($r = 0.489$, $p = 0.013$). But LDAEP was not correlated with score of hyperactive-impulsive symptoms ($p = 0.072$). When linear regression analysis was carried, the relationship between LDAEP and severity of symptoms was also significant ($p = 0.013$). When reassessing LDAEP of 17 subjects after Methylphenidate treatment. 12 children (70.6 % of 17 children) showed that LDAEP was decreased after taking methylphenidate.

Conclusions: These findings suggest that the LDAEP may be associated with the symptom severity in children with ADHD. To the best of our knowledge, this is the first study of assessing LDAEP in children with ADHD. Further investigation is needed.

Keywords: ADHD, ERP, LDAEP.

PS-109

The relationship between symptomatic and functional changes of Korean children and adolescents with attention deficit hyperactivity disorder treated with OROS methylphenidate

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This study examined the effect of OROS-methylphenidate on everyday functioning of children with ADHD. We tried to investigate the relationship between reduction of ADHD symptoms and improvement in functioning and identify factors that are predictive of functional improvement in ADHD patients.

Materials and methods: Prospective, multicenter, open-label study was conducted in 116 children (ages 6 to 18 years, mean age 9.4) with ADHD treated by OROS MPH for 12 weeks. ADHD symptoms, functional impairment, and other comorbid status were evaluated using various clinical subscales. Correlational analysis and multiple regressions were conducted to examine the relationship between symptomatic vs functional change after OROS-MPH treatment.

Results: OROS-MPH treatment of ADHD resulted in improvement in both ADHD symptoms and functioning of participants. Correlation analysis revealed a moderate-to-strong association between changes in the ADHD core symptoms versus functional measure scores ($r = -0.65$). The change in ADHD symptom after treatment, baseline severity of ADHD symptoms and age mediated functional outcomes. Attention is a stronger mediator of ADHD-specific functional outcomes than hyperactivity/impulsivity.

Conclusion: OROS-MPH treatment appear to improve both clinical symptoms and patients' functioning. The results of the present study suggests that symptom and function is partially overlapped but dissociable domains. Therefore, functional measures should be incorporated as important outcome measures in future studies with ADHD children.

Key word: OROS-MPH, ADHD, Symptoms, Functioning, Life Participation Scale

PS-110

The results of a screening study of ADHD in children in the development of a conceptual model of medical and social rehabilitation in the Republic of Belarus

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In order to clarify the theoretical, methodological and organizational aspects of medical and social rehabilitation of children with ADHD, taking into account local features from november 2010 to march 2011 performed a screening population-based study, which involved 1 846 children aged 3–15 years attending kindergartens and secondary schools in Minsk.

Clinical evaluation was performed using psychometric diagnostic scales Vanderbilt ADHD Diagnostic Teacher Rating Scale (VADTRS), sensitivity—98 %, specificity—86 %.

The results: a diagnosis of ADHD claim 6.2 % of Belarusian children aged 3–15 years: 9.3 % of boys and 2.9 % of girls. At the age of 3–15 years in boys ADHD were significantly 3.2 times more likely than girls ($p = 0.01$). Installed interquartile ranges of clinical symptoms of attention deficit, hyperactivity and impulsivity in the population of Belarusian children have obvious gender difference ($p = 0.000$), more pronounced (F -criterion = 135.18) in respect of hyperactivity.

It is worth noting the presence of isolated cases of marked clinical manifestations of ADHD in girls. However, in general, low diagnostic thresholds of hyperactivity and impulsivity in a community sample of girls due to the fact that girls rarely come to the attention of specialists in the preschool years and F90 diagnostic criteria in ICD-10, “the symptoms observed in the age of 7 years” may be subject to questioned.

In the Belarusian population hyperactivity symptoms are significantly reduced to 9–11 years ($p = 0.05$), the symptoms of attention deficit and impulsivity are quite pronounced at the age of 13–15 years, which coincides with the results of studies in other countries. The girls found a trend to an increase in impulsivity to the period of puberty that require further comprehensive studies.

The evaluation factors oppositional behavior, the results of a screening study, significantly ($p = 0.000$), the leading role of impulsivity ($r = 0.73$) and hyperactivity ($r = 0.72$), attention deficit disorder also has expressed the importance, albeit to a lesser extent ($r = 0.61$).

Social exclusion of children with ADHD are statistically significant ($p = 0.000$) to a large extent determined by the attention-deficit (0.70), moderate—oppositional behavior ($r = 0.47$), slightly—hyperactive ($r = 0.40$) and impulsive (0.38) behavior. The presence of anxiety and phobic symptoms also has a role ($r = 0.33$) in the social exclusion of a child with ADHD.

The results obtained are important in the development of a conceptual model of a system of differentiated complex medical and social rehabilitation of children with ADHD in Belarus.

PS-111

The situation of school refusal of outpatient in the child and adolescent psychiatry of Nara Medical University

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Objective: This study was aimed to investigate the characteristics of the patients aged 6–18 years old who were diagnosed as school refusal since April 2013 to March 2014 in the Child and Adolescent psychiatry specialized outpatient in Nara Medical University, to analyze their backgrounds, and to compare the characteristics of the previous study.

Methods: We defined school refusal as a student who had been absent from school more than 30 days a year, without economic reasons or physical diseases. The patients were diagnosed according to ICD-10,

and were adopted the main one diagnosis if they had overlapping mental diseases. We also collected the information about duration of treatment, medications, family history of mental disease, and situation as of July in 2014.

Results: There were 312 patients during this period. Of these, male were 167 (53.5 %) and mean age was 13.3 (SD; 1.95) years old. 82 patients (male; 61.0 %, mean age; 14.4) met the criteria of school refusal. 26 % of them had family history of mental disease. They were classified in F43 (23 %), F45 (21 %), F8 (11 %), and the other (45 %). Among school refusal patients, there was 18 % of F8 in the males but 0 % in the females. During this period, 47.5 % of them received medication, mainly antidepressant. 19 (23.8 %) patients had restarted to attending school at July 2014

Conclusion: There were 27 % of school refusal among all patients who visited our specialized outpatient, and most of them were diagnosed as F4. The percentage of school refusal was almost the same as that of in 1989–1992. But among them, schizophrenia was 15 % before, but was only 1 % in this investigation. The number of neurodevelopmental disorder (F8) was increasing in school refusal.

PS-112

The study of speech development and selection of therapeutic targets for correction in children with autism

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The study of speech development and selection of therapeutic targets for correction in children with autism

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Differential diagnostics research of abnormalities in speech development in children with autism creates the opportunity to pick up therapeutic targets for psychocorrection and development of active verbal interaction in the child with autism using specific differences.

Object: To choose therapeutic targets for psychological correction on the basis of diagnostic differences in the features of speech development in children with autism.

Materials and methods: The study involved 35 children with a diagnosis F 84.0; F 84.1; F 84.5. Diagnosis of speech carried by the developed questionnaire “Algorithm for diagnose of speech disorders in children with autism under 7 years old.”

Results and discussion: A wide range of speech disorders was identified, monotonous speech—12 %; violation of syllabic structure—23 %; grammatical structure—17 % violation rate of speech rate—4 %; repetitive speech—15 %; expressive speech disorder—17 %; receptive language disorder—9 %; Spontaneous initiation of speech—13 %; echolalia—5 %; loss of language skills—3 %

Psychocorrection included the selection of therapeutic targets and the use of speech stereotypes autistic child: the monotony of speech, change in syllable structure, speech repetition.

Psychologist established emotional connection based on the important for the child experiences, showed a leading representative modality of child and leading auditory perception of information (left or right ear).

On the top side psychologist introduced the usual verbal stimulus (verbal repetitions, sound action), which was associated with a positive statement of kinesthetic anchor at the wrist of the child.

This kinesthetic anchor used in the learning process with the development of necessary actions for daily life (such as: “Take (item name)”, “let’s go (name of the place)”.

Differentiation mechanisms of stimulation and the actualization of impressions, the formation of new semantic concepts were carried out

Learning process lasted 5–7 min due to exhaustion processes and repeated 5–6 times a day for the assimilation and fixation of new information and skills.

PS-113

The treatment outcome of inpatients with anorexia nervosa restricting subtype in a Japanese National Children’s Hospital

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Background: The incidence of eating disorders has been increasing in adolescent girls. Recently, it is reported that age of onset is becoming lower and chronic patients with a longer illness duration are increasing. To recover from physical complications or psychological symptoms, patients often need to receive inpatient treatment.

Aim: The purpose of the present study was to investigate the treatment outcome of inpatients with anorexia nervosa restricting subtype (AN-R) in a Japanese National Children’s hospital.

Methods: 43 eating disorder inpatients treated between 2003 and 2012 in Kagawa National Children’s Hospital were examined retrospectively. Of them, 23 had a diagnosis of AN-R (DSM-5). 18 of them who had first admission and completed the whole treatment were examined statistically.

Results: A significant weight gain was found after inpatient treatment (BMI; 13.7 ± 1.6 at admission and 16.7 ± 3.1 at discharge). A significant improvement of CGI-S (CGI-Severity of Illness) was found (6.5 ± 0.7 at admission, 4.6 ± 0.9 at discharge, and 2.0 ± 1.6 at end of treatment). Lower age of onset was associated with more serious CGI-S score at admission ($r = -0.53$, $p = 0.023$). However, lower age of onset was also associated with better CGI-S score at end of treatment ($r = 0.47$, $p = 0.048$). More serious CGI-S score at discharge predicted worse CGI-S score at end of treatment ($r = 0.52$, $p = 0.028$).

Conclusion: The results indicate that although AN-R inpatients with lower age of onset could have more serious illness state, they would get good outcome by inpatient treatment.

PS-114

Therapeutic effect of 12 weeks equine assisted activities and therapies (EAA/T) in children with attention deficit hyperactivity disorder

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The Disabled Center, Samsung Equestrian Team; Korea Advanced Institute Of Science And Technology

Proceedings Abstract:

Objectives: Attention deficit/hyperactivity disorder (ADHD) is most prevalent neurodevelopmental disorder. Currently the efficacy of medications in the treatment of ADHD is well established. However, it is estimated that between 10 and 30 % of patients treated with medications either do not improve adequately. Therefore there is a need for non-pharmacological options for the treatment of ADHD. Equine Assisted Activities and Therapy (EAA/T) has been introduced such an option. Building a relationship with horse promotes confidence, relationship skills and problem-solving skills. And during the EAA/T, Physical exercise has been reported to promote calmness and improve attentional function. But there have been limited studies in ADHD children. This study was designed to examine the effect of 12 weeks of EAA/T on ADHD symptoms and brain function in children with Attention deficit hyperactivity disorder (ADHD). Showing positive effect of EAA/T of a previous study with small sample size, clinical effectiveness and neural mechanism is still unclear in ADHD.

Methods: In 22 subjects who met DSM-IV-TR criteria for ADHD, symptom improvement after EAA/T was assessed by using ADHD rating scale (ARS), Clinical global impression (CGI), Korea-Child Behavior Checklist (K-CBCL). To investigate functional brain change, resting state-functional MRI (rfMRI) before and after EAA/T was scanned in children with ADHD who agreed to fMRI ($n = 6$). The Samsung medical center's IRB approved all procedures.

Results: After 12 weeks EAA/T, ADHD children showed significant improvement in ADHD severity compared to baseline. The ARS total scores indicated a significant improvement in total score, inattentive, and hyperactive-impulsive subscales (all $p < 0.001$). The CGI improvement was also evaluated. ($p < 0.001$). And there was significant improvement s on social problems' subscale of the K-CBCL ($p = 0.030$). Fractional amplitude of low frequency fluctuation was increased in the left anterior cingulate cortex, frontal pole, supramarginal gyrus ($p = 0.05$) after EAA/T.

Conclusions: This study suggests that 12 weeks EAA/T is effective for ADHD symptoms and may be related with the changed spontaneous neuronal activity in fronto-parietal regions.

Title: Therapeutic Effect of 12 Weeks Equine Assisted Activities and Therapy (EAA/T) in Children with Attention Deficit Hyperactivity Disorder

Keywords: Attention-Deficit/Hyperactivity Disorder and Imaging/Imaging Studies, Equine Assisted Activities and Therapy.

PS-115

This is my way to rest: depression and drug abuse in an adolescent

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1. Objectives educative: Several studies indicate that among the risk factors involved in drug abuse, which happens in a generalized manner during adolescence, it is possible to consider a number of psychological variables being self- concept and depression.

2. Proposition: The purpose of this case is to establish the relationship between each of these factors with the direct and indirect relationships among family functioning, multidimensional self-esteem in the use of drugs.

3. Methods: The case shows the relationship that exists between a major depressive disorder, abnormal attachment and drug abuse during adolescence.

The patient started to consume cannabis at the age of 14 after her grandmother's death, because she wanted to "forget about everything". She also showed depressive symptoms which got worse until the point that she made a suicide attempt.

4. Results: Girl, 15 years and 11 months, who presented depressive symptoms around 2 years ago, after her parents got divorced. In the beginning, she started with irritability and atypical behavior at home. One year ago, when her grandmother died, her depressive symptoms got worse and she started to use marijuana as a way to relive her symptoms. The last month, at the same time that she stopped to consume marijuana, she started with apathy, anhedonia, feelings of guilt and hopelessness. Finally she was lead to admission for a suicide attempt.

5. Conclusion: Substance abuse is common among adolescents with MDD. This case indicates that depressive symptoms in early life might signal a risk for increasing involvement in substance use among severe emotional disturbed youth.

Effective short-term adolescent depression treatment significantly reduces the rate of subsequent substance abuse, instead, alcohol or drug use should be assessed prior to adolescent MDD treatment and monitored even after MDD recovery. It is necessary to adopt a multidimensional perspective when analyzing the self-esteem of adolescents with substance use and to prevent the over-valuation of social and physical dimensions.

PS-116

To evaluate the perception of parental styles by a sample of adolescents with eating disorders

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Introduction: It is known that eating disorders have multiple causes in its origin. Numerous authors have studied the influence of the family in this illness.

Parents have a crucial part in the emotional and social development of their children and adolescents.

Diana Baumrind (1967) identified the main parental styles and their influence in the rearing of children and adolescents. It is known that the authoritative style is protectoral against psychopathology. In the literature, it's described that between 8.6 and 12.9 % adolescents with eating disorders perceive their parents' educational style as neglectful.

Objective: The main aim of this study was to evaluate the different dimensions/factors that constitute parental styles, in a sample of adolescents with eating disorders.

Methods: A sample of 35 adolescents diagnosed with an eating disorder (cross-section study) from an eating disorders consultation at a public hospital in Oporto was studied. Participants filled the Parental Educational Style Questionnaire Revised (QEEP-R), a question regarding their satisfaction in the relation with their parents (in a likert scale) and sociodemographic data. All questionnaires were self-fulfilled.

Results: When we compared mothers' educational dimensions/factors with fathers we found that there were statistical significant differences between them, and mothers showed higher values in all dimensions. Adolescents perceived the dimension "Promotion of Autonomy" as being the most significant.

We also found a positive correlation between the degree of satisfaction with the relationship with their parents, perceived by adolescents, and all the dimensions of parenting style.

Conclusions: Understanding the parental style could be of interest to prevent, as we could promote changes in the way parents, especially mothers, educate their adolescents. Special attention should be given to the promotion of autonomy, overprotection and responsiveness, as these are the most implicated issues in Eating Disorders, described in the literature.

PS-117

Tourette's syndrome in heterozygote, mentally retarded twins with epilepsy and psychotic manifestations—case report

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The Tourette's syndrome occurs in about 0.5 % of school-age children. The onset is usually between the age of 5 and 15 years. Twins studies, adoption studies and segregation analysis studies, all supports a genetic cause for Tourette disorders. The concordance—rate among monozygotic twins is 50 % and among heterozygote twins is 8–23 %. The mode of transmission, while mildly controversial, generally is thought to be due to a single major locus, inherited either as an autosomal dominant trait with reduced penetrance, or as a trait with intermediate inheritance in which some heterozygote manifest the disorder. Currently, the most accepted genetic model is an autosomal dominant pattern of inheritance with incomplete penetrance and variable expression. Recent studies of a long family pedigree suggest that Tourette disorder may be transmitted in a bilinear mode: that is, Tourette disorder appears to be inherited through an autosomal pattern in some families, intermediate between dominant and recessive. A recent study identified a sequence variant believed to be a candidate gene on chromosome 13q31.

Lower socio-economic status is a risk factor for Tourette's syndrome. Potential explanations include differential exposure to environmental risk factors or parental psychopathology as a measure of an increased genetic risk leading to decreased parental socio-economic status.

Tourette's syndrome in mentally retarded is also described but the association with mental retardation, epilepsy and psychotic phenomenon were unusual.

Our case report describes a heterozygote twins in orphanage (in Sombor, Serbia), a girl and a boy at age 15, both with Tourette syndrome. The girl is with moderate mental retardation and epilepsy and the boy with mild retardation and psychotic symptoms.

Keywords: Tourette's syndrome, twins, mental retardation.

PS-118

Trait socio-emotional education program and executive functions in ADHD

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Introduction: ADHD is a disorder of inhibiting behavior; as such, it disrupts the development and effective performance of the executive functions and the self-regulation. According to Barkley, executive

functions permit outer behaviour to be guided by forms of inner action that effectively bridge delays in crosstemporal contingencies and direct behaviour toward hypothetical future events (out-comes, goals, etc.) (Barkley 2008) A number of treatment implications flow from this model for the management of ADHD. Among them is a justification for the use of medications as a temporary corrective treatment for the underlying neuropsychological deficits in behavioural inhibition and self-control. Medications need to be accompanied by the externalization of sources of information aimed at controlling the individual's behavior. Objectives: The aim of this study was to determine whether a socio-emotional education program could show children with ADHD the way to control their behavior and improve executive functions. Method: A total of 25 boys aged 8–12 years with ADHD (hyperactive-impulsive, inattentive or combined type) participated in the study. All participants attended mainstream elementary schools. A Quasi-experimental pre-test and post-test design was used. Data was collected using a socio-demographic questionnaire, the Behavioural Assessment of the Dysexecutive Syndrome in Children (BADS-C), and the Behaviour Rating Inventory of Executive Functions (BRIEF)—Parent Form. During 12 weeks we worked on the ability to control and recognize emotions, empathy, self-determined motivation, self-esteem and conflict-resolution. Results: The outcomes revealed that executive functions significantly improved after the program implementation ($F = 4,7, p < 0.05$). Discussion: results showed that a socioemotional education program contributed significantly to improve executive functions in children with ADHD and the control of their behavior. Further research is needed with a bigger sample size to confirm these preliminary findings.

PS-119

Tratamiento en los pacientes con trastorno del espectro del autismo sin discapacidad intelectual

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Introducción: La comorbilidad psiquiátrica en los Trastornos del Espectro del Autismo (TEA) suele ser muy elevada y ésta se asocia con una mayor probabilidad de precisar tratamiento farmacológico, de ser hospitalizado o incluso de necesitar internamiento en régimen residencial.

Objetivo: Describir el tratamiento que realizan los pacientes diagnosticados de TEA sin discapacidad intelectual que realizan seguimiento psiquiátrico en la Unidad de Salud Mental Infanto-Juvenil.

Metodología: Se revisó la historia clínica de los pacientes diagnosticados de TEA de una de las consultas de la Unidad de Salud Mental Infanto-Juvenil de Burgos y se excluyó a los que presentaban discapacidad intelectual (capacidad intelectual < 70 objetivada mediante WISC-IV).

Resultados: Se encontraron 40 pacientes diagnosticados de TEA sin discapacidad intelectual de los 434 revisados. De estos 40 casos encontrados, 32 de ellos presentaban alguna comorbilidad psiquiátrica; el 32,5 % un TDAH asociado, un 28,1 % un trastorno de ansiedad como principal diagnóstico y un 12,5 % un trastorno afectivo. El 30 % de los TEA de alto funcionamiento presentaban más de una patología comórbida. De los 40 pacientes con TEA, tan sólo 9 no estaban medicados, 6 de ellos sin comorbilidad alguna, 2 diagnosticados de TDAH y 1 con mutismo selectivo. Entre los 31 que sí tomaban algún psicofármaco, el fármaco principal fue Metilfenidato en 13 de ellos, un Antipsicótico en 10 de ellos, un fármaco antidepresivo en 7 pacientes y Alprazolam como fármaco principal en tan sólo uno de

ellos. Además, entre los medicados, 17 pacientes tomaban 2 ó más fármacos simultáneamente. Tan sólo 3 de estos pacientes precisaron un ingreso psiquiátrico por inadecuada evolución clínica. Aunque se les recomendó a todos en el momento del diagnóstico, 14 de los 40 pacientes no realizaban un tratamiento psicológico específico a pesar de que 12 de ellos presentaban alguna comorbilidad psiquiátrica y 11 precisaban tratamiento psicofarmacológico.

Conclusiones: Hasta el 22.5 % de los pacientes con un TEA de alto funcionamiento no precisaron ningún tratamiento psicofarmacológico a pesar de que un tercio de ellos presentaba comorbilidad psiquiátrica. El principal psicofármaco utilizado fue Metilfenidato así como los fármacos antipsicóticos (asociados o en monoterapia). También fue representativo el uso de fármacos antidepresivos en esta población. El 54.8 % de los pacientes medicados precisaron varios fármacos simultáneamente y tan sólo el 7.5 % del total fueron ingresados en psiquiatría. Hasta el 35 % de los pacientes con TEA sin discapacidad intelectual no realizaban tratamiento psicológico específico.

PS-120

Unemployed adolescents with extreme obesity—evaluation of a structured approach of care to overcome socioeconomic treatment barriers

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Background: Adolescent obesity entails a high risk of somatic and psychiatric comorbidities and reduced quality of life. Additionally, especially extreme obesity often impedes with social and vocational integration. For several reasons, socioeconomically disadvantaged individuals have limited access to available obesity treatment options, including bariatric surgery. In our pilot study we aimed to capture the rate of unemployed adolescents with extreme obesity willing to participate in a structured diagnostic and interventional program to potentially enable bariatric surgery.

Methods: Unemployed adolescents (14.0–24.9 years) with obesity ($BMI \geq 30 \text{ kg/m}^2$) were offered to participate at initial diagnostic procedures followed by a low-level group intervention on the premises of a local job center. We applied standardized questionnaires to assess health-related quality of life (DISABKIDS), depression (BDI-II), self-esteem (Rosenberg-Scale) and social anxiety (SASKO).

Results: Over the 18-months recruitment period of our pilot study, 80 eligible adolescents were identified by their case managers; of these 53 attended the initial appointment. 34 adolescents (mean BMI (SD) = 45.59 (6.29)) consented to participate in the program. We found clinically relevant depressive symptoms in 33 % and symptoms of social anxiety in 60 % of the sample. Six participants were eligible for bariatric surgery and directed to a local competence network for an individual assessment of indication.

Conclusion: The preliminary results are promising with regard to the proportion of unemployed adolescents with extreme obesity who benefited from our structured approach of care in cooperation with the job center. To evaluate the efficacy of such a program, longitudinal data concerning health and vocational perspective of the participants are required. Furthermore, the feasibility of this approach needs to be assessed in a larger model region encompassing more than one job center.

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PS-121

Verbal memory and vocabulary in children with developmental dysphasia and abnormal EEG

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The aim of our study was to examine how verbal memory affects active and passive vocabulary in children with developmental dysphasia and abnormal EEG findings, as well as to distinguish differences in verbal memory and lexical fund between children with developmental dysphasia who have abnormal EEG and children with the same disorder but with no EEG abnormalities. Children with developmental dysphasia have difficulties in understanding, using and expression of language in varying degrees in one or all areas of phonology, semantics, syntax and pragmatics. The delay or lag in the development of linguistic structures can be an indicator of dysfunction in specific brain areas. These data highlights the importance of examination of language functions in relation to the functioning of the central nervous system. Different frequency bands and their power change that can be obtained in the EEG signal have been connected to specific cognitive functions.

The sample consisted of 15 children with abnormal EEG findings, and 15 children with normal EEG. All subjects have developmental dysphasia. For testing verbal memory we used the “Verbal memory test”. For the evaluation of passive and active vocabulary we used “Test for the evaluation of the first level of abstraction of nouns”.

The results showed that children with normal EEG findings have better achievements in almost all tests, and that the results of tests in the experimental group was not the same between the genders. Children with abnormal EEG had limited vocabulary, difficulties to adopt the meaning of the words, to learn new words, and to define words. They understood only those words that are used very frequently.

Based on these results, it can be concluded that there is a correlation between capacity of verbal memory and the lexicon in children with developmental dysphasia and that there are significant differences in this abilities between children with normal EEG and children with abnormal EEG findings.

Keywords: Verbal memory, Vocabulary, Developmental dysphasia, EEG findings.

PS-122

Vigilance deficit in ADHD children: evaluating CPT performance

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Object: Attention-deficit/hyperactivity disorder (ADHD) is characterized by various neurocognitive dysfunctions. Among them vigilance deficit was estimated as a core deficit of neurocognitive function in ADHD. Purpose of this study was to evaluate vigilance deficit in ADHD children using neurocognitive test battery.

Method: Sixteen drug naïve ADHD children (ADHD group; 16 boys, mean age was 12.0 ± 1.2) and 17 healthy children (Control group; 12 boys and 5 girls, mean age was 11.0 ± 1.8) were participated in this

study. Wechsler Intelligence Scale for Children-Third Edition (WISCIII), Wisconsin Card Sorting Test (WCST) and Continuous Performance Test (CPT) were used to evaluate their neurocognitive function.

Result: Mean score of Full Scale IQ (FSIQ) was 99.5 ± 12.7 in ADHD group and 106.5 ± 13.9 in Control group. Category achievement (CA) of WCST in ADHD group was 2.8 ± 1.9 and in Control group was 3.7 ± 2.1 . No significant differences between two groups were found in age ($p = 0.53$), FSIQ ($p = 0.12$) and WCST ($p = 0.18$). CPT was consisted of Simple Reaction Task (SRT), X-Task (X-T) and AX-Task (AX-T). There were significant differences in Omission Error (SRT; $p = 0.018$, X-T; $p = 0.03$, AX-T; $p = 0.002$) and Commission Error (X-T; $p = 0.008$, AX-T; $p = 0.03$). Similarly, there were significant differences in coefficient of variation (CoV) of Reaction Time (RT) in each three tasks ($p < 0.05$), although there were no differences in RT (SRT; $p = 0.35$, X-T; $p = 0.12$, AX-T; $p = 0.26$).

Discussion: This study suggested that vigilance deficit was core symptom of ADHD rather than executive dysfunction. CPT had the potential to evaluate vigilance deficits in ADHD children.

PS-123

Weight, height and body mass index in patients with adhd treated with methylphenidate

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Objectives: Factors as gender, stimulant dose, duration of treatment and age when starting treatment remain unclear in previous studies about ADHD and growth. This article includes a large sample of Spanish patients and provides more data considering age and sex of patients. Our aims were: to describe weight, height and body mass index (BMI) evolution before and after treatment with methylphenidate, of a group of patients with ADHD.

Patients and methods: 342 patients (6–18 y.o.) with ADHD, treated with methylphenidate in the Child and adolescent Psychiatry Unit, University Hospital of Navarre, are included in a observational longitudinal study. Weight, Height and BMI-Z scores are measured at baseline and at last follow-up.

Results: Patients are 10.66 (3.84) y.o. 79.9 % are males. 68.6 % were children (6–12 y.o.), and 31.4 % adolescents when they started treatment. Weight and BMI are affected by treatment (weight: baseline 0.34 (1.22) SDS, follow-up -0.06 (1.38), $p < 0.001$); BMI: baseline 0.35 (1.10) SDS, follow-up: -0.23 (1.08) at, $p < 0.001$). There are no differences in height before and after treatment. However, in the group of children (6 to 12 years), height is slightly affected (baseline height-SDS 0.04 (1.14), follow-up -0.10 (1.11), $p < 0.001$). This effect is not observed in adolescents. There is a weak but significant correlation between age at starting methylphenidate and height-SDS ($r = 0.21$, $p < 0.001^{***}$), and also between the dose and all the anthropometric values ($r = -0.18$, $p < 0.001^{***}$ for weight-SDS, $r = -0.23$, $p < 0.001^{***}$ for height-SDS and $r = -0.18$, $p < 0.001^{***}$ for BMI-SDS). The duration of treatment did not correlate significantly with weight, height, or BMI.

Conclusions: Methylphenidate slightly decreases weight and BMI in this group of ADHD patients, and affects height only if treatment is started before 12 y.o. Children who start treatment younger or are taking higher doses, show greater impact in height.

PS-124

What I am? Am I autistic, hyperactive or I have anorexia?

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Introduction: This is not unusual the emergence of behavior disorders of all kinds, and in particular those that have to do with the food area as the first symptom of an autism spectrum disorder. The early diagnosis of these syndromes can help to establish an appropriate educational guidelines to minimize the emotional impact that involve the adaptation to the social environment of these patients.

We present the case of a of a 7 years old girl which was admitted in our inpatient unit because food problems: she only ate porridge and she refused to try new foods. Personal History: diagnosed by her neuropsychiatrician of ADHD, she was in treatment with 27 mg of methylphenidate.

The parents told us that the girl was restless, without problems of behavior or performance in the college. For some things is very responsible but not for others, it is not sociable, she began to speak very soon. She was defined as very smart girl, the parents observed that their daughter never had laughed with the cartoons, she was very clumsy for sports, and she didn't tolerate the frustration. Finally the parents said that "she didn't play as normal children".. She didn't have sleep problems. No presence of psychotic symptoms

Additional tests: EEG and other physical evidence: no significant findings.

When we took all these data together with the presence of an adult language, with a peculiar tone; made us think that it might point to an autism spectrum disorder, in particular of Asperger syndrome. Differential diagnosis was made with ADHD vs Oppositional Defiant Disorder.

Conclusions: If we pay attention to these symptoms, apparently banal, we can make an early diagnosis of an autism spectrum disorder, as a consequence, we could work in a pharmacological and therapeutic way with these children and also their parents.

PS-125

Zuclopenthixol treatment of drug refractory severe behavioral disturbances in 10 year old boy with autism spectrum disorder comorbid with attention deficit hyperactivity disorder and intellectual disability

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Severe behavioral disturbances which are defined as aggression, self-injurious behavior and severe tantrums are insistent symptoms frequently experienced by children with autism spectrum disorders. Atypical antipsychotics are most commonly used as first-line pharmacotherapy for the treatment of severe behavioral disturbances. Risperidone and aripiprazole have been US Food and Drug Administration approved first-line treatment of irritability which was defined as a symptom cluster, including aggression, self-injurious behavior and severe tantrums in children with autism spectrum disorders. In a recent study, drug refractory severe behavioral disturbances in chil-

dren with autism spectrum disorders were defined as behavioral symptoms requiring medication adjustment despite previous trials of risperidone and aripiprazole or previous trials of three psychotropic drugs targeting the symptom cluster, one of which was risperidone or aripiprazole. Our case is 10 year old boy who was diagnosed with autism spectrum disorder comorbid with attention deficit hyperactivity disorder and intellectual disability had severe behavioral disturbances. He has been treated risperidone 2.5 mg/day and atomoxetine 40 mg/day for last 4 months and before this treatment pharmacotherapy including combinations of risperidone, aripiprazole, haloperidol, methylphenidate and atomoxetine had been used but the treatment response of severe behavioral disturbances were insufficient. So we defined these symptoms as drug refractory severe behavioral disturbances. We couldn't reach any convincing evidence of a treatment plan of drug refractory severe behavioral disturbances in autism spectrum disorder in the literature search. One of the study which focused on the treatment of severe behavioral disturbances in mentally retarded children and adolescents was found zuclopenthixol monotherapy effective and well tolerated in those patients. In this study the beneficial effect of zuclopenthixol was described as its combined antagonistic effect on D1/D2 and alpha-1 receptors. Therefore zuclopenthixol 5 mg/day was added to our case's ongoing pharmacotherapy. This treatment has been going on for 8 weeks and we have got significant improvement in clinical observation and family report on severe behavioral disturbances without any side effects. With this case presentation, we concluded that clinicians can be helped to question and study the treatment of drug refractory severe behavioral disturbances in autism spectrum disorders and possible use of zuclopenthixol treatment.

MONDAY POSTERS

PM-001

Attention to affected under severe mental disorder. Development of an early warning unit

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Introduction: Early Warning Unit arose from the need of creating Middle Child Mental Health Services for severe psychopathology approach. A relational psychotherapy work through individual sessions, group, relational psychomotor/sensory integration, psychotherapeutic consultations with family and psychoeducational approach is performed. Similarly, a networking with pediatricians, schools, social services and other resources that are operating in the case is done.

Keyword: ASD, Early Warning Unit

Objective: To show how our Unit. Analyze the sample of patients who have undergone early care unit since its opening in 2006.

Methods: Retrospective descriptive study of 8 years.

Results: In our study we found that the prototype of patients admitted to our unit is a 4 year old male patient middle-aged, mostly diagnosed with pervasive developmental disorder with psychomotor difficulties, language and emotional disruption to every day situations. Rest of earrings analyze data.

Conclusions: In our practice we have observed that early detection of children's mental condition along with proper referral to programs on computers early intervention where intensive treatment is performed,

improves the outcome and prognosis of these patients, and the overall relationship in different contexts of everyday life.

References

Bowly J (1988) *Affective Links: training, development and lost*. Morata, Madrid

Levorci S, Diatkine R, Soula M (1988) *Treaty of child and adolescent psychiatry*. New Library, Madrid

Rodriguez J (1998) *Psychopathology of children and adolescents*. Sevilla. University of Sevilla 1995. National Center for Clinical Infant Programs Classification diagnosed: 0–3. Diagnostic Classification of Mental Health and developmental disorders of infancy and early childhood. Ed. Paidós, Iberica, Barcelona

Ajuriaguerra J De, Marcelli D (1982) *Handbook of Child Psychopathology*. Ed. Toray-Masson, Barcelona

Ajuriaguerra J De et al (1970) *The therapeutic choice in child psychiatry*. Ed. Toray-Masson, Barcelona

Avila Espada A, Poch I Bullich (eds) (1994) *Technical Manual of Psychotherapy*. Siglo XXI Editores, Madrid

PM-002

12 months follow-up of a child and adolescent sample at risk for psychosis

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Introduction: In the last 15 years several data has been collected in the field of high risk for developing psychosis. Several studies have been reported that about 17–28 % of subjects with clinical high risk (HR) criteria developed a psychotic disorder at 12 months 1 of follow-up, although the percentages vary in the different studies. However, the amount of the studies has been developed in youth or adult samples, and we still have little data of child and adolescent samples. A previous study in adolescent sample showed lower transition rates at 24 months follow-up (7,1 %), and a significant reduction of prodromal symptoms 2.

Objective: The aim of this study is to determinate clinical characteristics and outcome of a child and adolescent sample at 12 months follow-up.

Method: Data were collected from an on-going prospective, naturalistic and multicentric study from Hospital Clinic and Hospital Sant Joan de Déu of Barcelona. Help-seeking child and adolescent (10–17 years) were recruited. Inclusion criteria: (1) Attenuated positive or negative symptoms in the previous 12 months. (2) Brief limited intermittent psychotic symptoms. (3) First or second degree relative with schizophrenia or schizotypal disorder plus impairment of functioning. Exclusion criteria: IQ < 70 and a diagnosis of neurodevelopmental disorder. Prodromal symptoms were assessed by The Semistructured Interview for Prodromal Syndromes (SIPS), and functional outcome was assessed by the Global Assessment of Functioning (GAF), by the Global Functioning Role Scale (GFRS) and the Global Functioning Social Scale (GFSS).

Results: At 24 months follow-up, 28 high risk patients were recruited (mean age 15,35 ± 1,83), 16 girls (57 %) and 12 boys (43 %). 25 % of the sample has converted to fully psychotic disorder; 2 at the 6 months assessment and 5 at the 12 months assessment. 57 % (n = 4) of the ones who have converted were girls and 43 % (n = 3) were boys. Two converted to bipolar disorder and 6 to psychotic disorder NOS.

The non-converted group have improved in all the clinical and functional scales: the attenuate positive symptoms ($p < 0.001$), the attenuated negative ones ($p < 0.001$), the disorganized subtype ($p = 0.002$) and the general subscale ($p < 0.001$). The GAF, GFRS and GFSS also improve significantly.

Conclusion: Child and Adolescent population presents similar transition rates than adult and youth samples. Patients show a significant reduction of prodromal symptoms and functional improvement according recent literature. However, a larger sample should be collected in order to generalize these results.

PM-003

A case report of dementia and psychosis in an adolescent female with idiopathic brain calcifications

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We report a case presenting with psychiatric (psychotic, affective, cognitive) and some neurological symptoms with onset in adolescence.

A 17 year-old female was admitted to University Psychiatric Hospital because of suicidal behavior. Tactile hallucinations, secondary hypochondriacal delusions, disorganized behavior, stereotypical movements, emotional lability and below average intellectual level were the main symptoms observed during hospitalization. Total PANSS score on admission was 120. The patient had a history of school phobia, behavioral and emotional disorders, normal cognitive development until adolescence and a three-year history of chronic headache. Calcifications in the area of basal ganglia and thalamus with symmetrical calcification in head, body and tail of caudate nucleus and ventral part of thalamus were determined by computer tomography. No further pathological findings were identified by magnetic resonance imaging. Calcium, phosphate, and parathyroid hormone blood levels were normal. Vitamin D levels were decreased with decreased Ca levels in the urine. No Ca depositions in other organs were identified by ultrasound scan. Ophthalmological, ear-nose-and-throat examination and electroencephalography were also normal. The patient's mother had a history of chronic depression. Computer tomography of the head was normal in patient's mother, the patient's father is still under evaluation. Genetic analysis of genes associated with familial idiopathic brain calcifications (Fahr's disease) is currently performed.

The patient was treated symptomatically with quetiapine and sertraline. Psychotic, affective and behavioral symptoms were improved, intellectual abilities however were not. Total PANSS score at discharge was 39.

Idiopathic familial brain calcification or Fahr's disease is a rare neurodegenerative disorder with characteristic calcium deposits in the basal ganglia and other brain areas visualized with neuroimaging. It typically affects individuals in the 3rd and 4th decades of life with progressive neuropsychiatric and movement disorders. Neuropsychiatric symptoms can be the first or the most prominent manifestations ranging from mild difficulty in concentration, memory changes, personality and behavior changes, to frank psychosis and dementia. Symptoms can change over time. There is currently no etiological treatment.

Keywords: Case report, Basal ganglia calcification, Psychosis, Suicidality, Intellectual decline.

PM-004

A systematic review and network meta-analysis to assess the relative effectiveness of antipsychotics for treatment of paediatric schizophrenia

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Introduction: Early diagnosis and effective treatment is imperative in paediatric schizophrenia due to the impact of the disorder on patients, which reduces their ability to live a productive and independent life. This research explores the relative efficacy of trialled antipsychotics for early-onset schizophrenia in order to determine which treatments are potentially efficacious in this population.

Methods: A systematic literature review was conducted to identify trials conducted in children and adolescents with schizophrenia that reported symptom control/effectiveness using the positive and negative syndrome scale (PANSS), a medical scale frequently used for assessing the schizophrenia symptom severity in trials. A Bayesian random effects network-meta analysis (NMA) was performed, synthesising data for a number of outcomes, including mean change from baseline in PANSS scores, weight gain and treatment discontinuation due to adverse events. Comparative efficacy for PANSS scores was measured by the mean difference (MD) and all relative effects were compared with placebo.

Results: Eleven studies were identified in the systematic review and ten were included in the NMA, comprising 1689 patients. All treatments showed a greater reduction in PANSS scores at 6 weeks vs. placebo; however, not all results were statistically significant. Haloperidol (5–15 mg/day) had the greatest reduction vs. placebo (MD -19.1 , 95 % CrI [-39.5 , 1.5]), followed by molindone (10–140 mg/day) (MD -14.4 , 95 % CrI [-24.9 , -4.1]), olanzapine (2.5–20 mg/day) (MD -13.0 , 95 % CrI [-20.3 , -5.6]) and risperidone (0.5–6 mg/day) (MD -13.0 , 95 % CrI [-19.4 , -6.4]). Treatment ranking probabilities suggested that haloperidol had the highest probability of being the best treatment in the network for reducing total PANSS scores (probability = 0.59). All treatments showed a trend of greater odds of discontinuing treatment due to adverse events vs. placebo, however no pairwise comparisons were statistically significant. Nine out of thirteen treatments showed a trend of increased weight compared with placebo, however no pairwise comparisons were statistically significant.

Conclusions: The analysis demonstrates that many of the treatments are efficacious in controlling symptoms, although side effects resulting from treatment should be considered; weight gain is commonly observed, and discontinuation due to adverse events is variable between studies and treatments. The lack of high-quality studies in this population highlights a need for further research.

PM-005

Adolescents sheltered. New symptom in video games addiction

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Introduction: Demands for video game addiction treatment have increased significantly in recent years in adolescents. Many of these patients have interpersonal relationship problems and take refuge in their rooms to cope this.

Aims: Describe the profile of adolescents “sheltered” which viewed in Addictive Behavior Unit for this reason during the years 2010–2014.

Method: We defined as “sheltered” the adolescent who is enclosed at home over a week. The subjects were evaluated with diagnostic criteria DSM-5 for video game addiction, Ko criteria for Internet addiction in adolescents, the interview Kiddie Sads for mental disorders, Global Clinical Index (ICG) at 3 months intervention.

Results: A total 104 subjects were evaluated, 65 of them met diagnostic criteria for video game addiction. Of these, 57 reported using the video game as a shelter. The mean age of the adolescents was 15 years, and 84 % were boys. Of total cases with addiction to video games, 12 had affective disorders, 19 disruptive behavior disorders, 7 ADHD, 10 anxiety disorders, 5 personality disorders, 9 mixed disorder of conduct and emotions, one psychotic disorders. 49 % of cases suffer more than one disorder. 32 patients reported a loss of friends group. In 76 % of cases the school level is deteriorated and 40 % have been bullied. At 3 months, ICG shows improvement in 48 % of cases.

Conclusions: Many adolescents with video game addiction take refuge in their homes. These patients present a high comorbidity with other mental disorders. Loneliness seems an important motor for the addictive behavior. It is important to conduct an assessment of these mental disorders and make a specific intervention to break the reclusion.

Keywords: Adolescents; Video game; Addiction; Reclusión.

PM-006

Adolescents with suicidal behavior: results from a new clinical intervention protocol at the Sant Joan De Déu University Hospital in Barcelona (Spain)

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Introduction: The Child and Adolescent Mental Health Service at the Sant Joan de Déu University Hospital in Barcelona (Spain) has a new team specializing in assessing and treating suicidal behavior in young people that present to the emergency service. The team has designed a protocol of evaluation and its main aims include, not only to do a thorough assessment of the patient and to design a safety plan post-discharge from hospital, but also to ensure a good engagement with community services as patients have to be seen for follow-up within 72 h post-discharge from hospital.

Hypothesis: The implementation of this new protocol of evaluation will reduce the suicidal behavior of the young person after the initial assessment and will ensure a better engagement with community services.

Methodology: This is a prospective study with an initial assessment in the emergency setting and follow-up of patients for up to a year.

Results and conclusions: In the last year we have seen more than 250 adolescents with suicidal behavior. Of the initial 106 patients (November 2013–April 2014) 85 % were female and the mean age was 15 years (9–17); 64 % took tablets as a means to take their own life; 60 % were diagnosed with an affective disorder or adjustment disorder, 8 % with conduct disorder and 8 % with dysfunctional personality traits. 57 % had had previous suicidal behavior. Of the first 106 patients, 45 % were admitted to an inpatient unit or a day hospital after the initial assessment; from the rest 99 % attended their first follow-up appointment with community services and 5 % (n = 5) had repeated suicidal behavior within 6 months. We are currently in the process of analyzing data from the whole sample. To conclude, patients assessed by the new specialized team have a lower risk of repeated suicidal behavior and a better engagement with services.

References

1. Gould M, Greenberg T et al (2003) Youth suicide risk and preventive interventions: a review of the past 10 years. *J Am Acad Child Adolesc Psychiatry* 42(4):386–404
2. Miranda R, Shaffer D (2013) Understanding the suicidal moment in adolescence. *Ann NY Acad Sci* 1304:14–21
3. Pfeffer C (2001) Youth suicide: prevention through risk management. *Clin Neurosci Res* 1:362–365

PM-007

Adverse reactions of methylphenidate in children with attention deficit–hyperactivity disorder: report from a referral center

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Objective: The aim of the current study was to evaluate methylphenidate adverse reactions in children with attention deficit–hyperactivity disorder (ADHD).

Methods: During a 6 month period, all children receiving methylphenidate treatment alone or with other agents were screened regarding all subjective and objective adverse drug reactions (ADRs) of methylphenidate. Detection of ADRs was performed by face-to-face interview with patients or his/her parents at regular follow-up office visits through a checklist of methylphenidate adverse reactions in relevant scientific literature and reviewing their brief office charts. Required data including patients’ age, sex, weight and height at the beginning of methylphenidate therapy, and at the present, comorbidities, ADHD treatment, drug regimen and co-administered medications (name, dosage, frequency, indication, and route of administration) and detected ADRs [clinical manifestation and the causative drug(s)] were registered in a predesigned form. ADRs reported by the patient daily (on a daily basis) and 2–3 times a week within the recent 1–2 weeks were classified as “always” and “sometimes,” respectively.

Causality and seriousness of detected ADRs were assessed by relevant World Health Organization definitions. The Schumock and Thornton questionnaire was used to determine preventability of ADRs.

Findings: Seventy-one patients including 25 girls and 46 boys with ADHD under methylphenidate treatment were enrolled within the study period. All (100 %) ADHD children under methylphenidate treatment developed at least one ADR. Anorexia (74.3 %), irritability (57.1 %), and insomnia (47.2 %) were the most frequent methylphenidate related adverse reactions. Except for one, all other detected ADRs were determined to be mild. In addition, no ADR was considered to be preventable and serious.

Conclusion: Our data suggested that although methylphenidate related adverse reactions were common in children with ADHD, but they were mainly mild and nonserious.

PM-008

Aepnya research grant 2013: influence of a gluten-free and casein-free diet in behavioral disorders of children and adolescents diagnosed with autism spectrum disorder

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Background: Autism Spectrum Disorder (ASD) is a complex and heterogeneous group of neurodevelopmental disorders that share clinical manifestations in three levels: changes in communication, impaired social interaction and restricted and stereotyped patterns of behavior. Since 1943 autism was first described by Leo Kanner, how to address these disorders has not changed significantly. Today, still set as therapeutic pillars psycho-educational interventions and psychopharmacological management when these behavioral changes are. The gluten-free and casein-free diet, as etiopathogenic and therapeutic approach in ASD, has attracted great interest in recent years, although there are still many unknowns regarding its mechanism of action, response profile, safety, etc.

Hypothesis and Objectives: Our working hypothesis is that diet without gluten and casein can provide improvements in behavioral syndrome of ASD. The main objective of this study is to determine the influence of a gluten-free and casein-free diet on behavioral disorders of children and adolescents diagnosed with ASD and investigate the correlations between behavioral changes and urinary levels of beta casomorphin (metabolization product of casein).

Methods: The study design is a crossover clinical trial in which 30 children and adolescents diagnosed with ASD participate and in which each will undergo 6 months to a diet containing gluten and casein (normal diet) and 6 months with a diet free of these components (exclusion diet). It randomly assigned the order of diet of each participant (starting with one kind or another diet). It will be assessed the subjects in three stages of the study: before starting any dietary intervention, after the period of normal diet and after the period of exclusion diet. Each evaluation will consist of completing three validated questionnaires to measure behavioral disorders in autism spectrum disorders (ABC-ECA, ERC III-A, ATEC) by parents and therapists of the participants, and determining urinary levels beta casomorphin. Monitor adherence to the diet will be assessed through the completion of two weekly questionnaires about food eaten for 24 h (Questionnaire 24 h), and also a monthly survey done during the exclusion diet will be completed by parents, asking about the degree of perception of performance and effort in introducing the diet. In addition, at baseline is being collected prior to initiation of the study (Dietary History) background information on dietary habits nutritional information.

Results: At the moment, this research study is in the last phase of dietary intervention. The final results of the data analysis will be exhibited in the presentation.

PM-009

Affective disorders in psychosis risk syndrome (PRS) in a child and adolescent sample

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Introduction: PRS is characterized by the presence of several clinical indicators that reflect the patient vulnerability for developing a psychotic disorder. The most prevalent DSM-IV diagnoses among clinical HR subjects at baseline were anxiety and mood disorders, with the majority of subjects having at least one of these diagnoses.

Objectives: The aim of this study is to examine the processes underlying the symptoms related to mood disorders by investigating the affective deficits in adolescents at risk for schizophrenia. We have focused on these symptoms for the following reasons. First, affective deficits are considered a central part of the negative symptom syndrome. A second reason is that, as we explain previously, the mood disorders are one of the most frequent diagnoses in HR patients.

Method: Baseline data were available from a longitudinal multicenter study, which evaluated the clinical, cognitive and neuroimaging results of patients with PRS compared with a control group. We evaluate the subjects with the Kiddie-Sacks Scale, the HDRS and the SIPS and SOPS. Data analysis were performed by SPSS 20.0 statistic program.

Results: A total of 70 patients (mean age 15.2 ± 1.63 ; 60 % females) and 33 controls (mean age 15.23 ± 1.37 ; 60.6 % females) have been recruited.

We've found positive correlations between the scores of the HDRS and the scores of the SOPS with a $p < 0.0001$ with a correlation of 0.538. The different correlations between HDRS and the SOPS subscales are the following: P1 ($p = 0.028$; correlation 0.296), P2 ($p = 0.002$; correlation 0.404), P total ($p = 0.028$; correlation 0.296), N2 ($p = 0.001$; correlation 0.453), N3 ($p = 0.020$; correlation 0.313), N4 ($p < 0.0001$; correlation 0.507), N total ($p = 0.006$; correlation 0.367), D4 ($p = 0.015$; correlation 0.327), D total ($p = 0.040$; correlation 0.278), G1 ($p = 0.006$; correlation 0.367), G2 ($p = 0.001$; correlation 0.457), G4 ($p = 0.002$; correlation 0.420), G total ($p < 0.0001$; correlation 0.548).

We've found positive correlations between the scores of Young and the scores of some subscales of the SOPS. The different correlations are the following: P3 ($p = 0.002$; correlation 0.419), D1 ($p < 0.0001$; correlation 0.592), D2 ($p = 0.049$; correlation 0.270), Dtotal ($p = 0.015$; correlation 0.328), G3 ($p = 0.006$; correlation 0.374).

Conclusion: Up to date, the analysis of the depressive diagnoses of a sample of PRS patients shows that it is one of the most prevalent diagnoses in Axis I. Moreover, it shows that there is a correlation between the affective and prodromal symptoms, and consequently it could be a possible target for the study of the non-converters subjects and also as the comorbidity of the converters.

PM-010

Analysis of changes in traumatic symptoms of children affected by the 2011 Japan earthquake and tsunami

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Background: The aim of this study was to assess changes in traumatic symptoms 8, 20, 30 and 42 months of the 2011 Japan huge earthquake and tsunami.

Methods: The study comprised four groups. Copies of the Post-Traumatic Stress Symptoms for Children 15 items (PTSSC-15), a self-rating questionnaire on traumatic symptoms, were obtained from 11,639 children (8-month period), 10,597 children (20-month period), 10,812 children (30-month period), and 10,654 children (42-month period). We calculated the total score, PTSD subscale, and Depression subscale of PTSSC-15.

Results: The PTSSC-15 total score and PTSD subscale of children belonging to 1st–9th grade groups who were tested 42, 30 and 20

months after the tsunami significantly decreased compared with those of children tested 8 months after the tsunami. The PTSSC-15 total score of boys in 7st–9th grade groups tested after 42 and 30 months did not decrease significantly compared with those of children tested after 20 months. The PTSSC-15 PTSD subscale of children in 1st–9th grade groups tested after 42 months significantly decreased compared with those of children tested 30, 20 and 8 months after the tsunami. The PTSSC-15 Depression subscale of children in 1st–3rd and 7st–9th grade groups evaluated after 42 months significantly decreased compared with those of children evaluated after 30 months.

Conclusions: This study demonstrates that the traumatic symptoms of children who survived the massive tsunami improved with time. Nonetheless, the traumatic symptoms included PTSD and depressive symptoms, which in some cases did not improve consistently 8, 20, 30 and 42 months after the disaster.

PM-011 Anxiety and depression in mothers of children with autism spectrum disorders (ASD) and attention deficit hyperactivity disorder (ADHD)

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Parents of children with psychiatric disorders frequently experience higher levels of psychological dysfunction than parents of children with typical development. Severity of ASD and ADHD manifestations in particular may significantly distress parents and higher rates of depression have been reported in mothers of these children.

We intended to study anxiety and depression symptoms experienced by mothers of children with Autism Spectrum Disorders and Attention Deficit Hyperactivity Disorder.

Methods: In this cross-sectional study, data about participants demographic characteristics and child's behavioural problems were collected through a battery of questionnaires. ADHD was diagnosed by a child psychiatrist according to DSM-IV-TR criteria for this disorder and ADHD children were divided in sub-groups, according to the type of symptoms in inattentive type, hyperactive type or combined type. ASD children were diagnosed by a child psychiatrist and fulfil score for ASD in ADOS-2 and ADI-R scales. Symptoms of anxiety and depression were assessed through the Portuguese version of Hospital anxiety and depression scale (HADS). The HADS scores were correlated with children symptoms severity.

The results of the study suggested elevated levels of depression and anxiety in mothers of ASD and ADHD children. These are important findings since literature suggests that maternal mood and anxiety symptoms may be related to depression and anxiety in their children. Findings are discussed with respect to understanding the needs of such families, including service provision.

Results: Preliminary results show elevated levels of depression and anxiety were detected in mothers of ASD and ADHD children (mean HADS score for depression: 10.4 mean HADS score for anxiety: 11.7).

Present findings in mothers of ASD and ADHD children may represent the burden of their children disorder but at the same time literature suggests that maternal mood and anxiety symptoms may enhance the risk of affective disorder in their children. Understanding the needs of such families, including service provision is underscored. In conclusion, these results reinforce the needed for a future investment in this clinical subject.

PM-012 Assessing problematic behaviors in Korean children with developmental disorders

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Introduction: The number of Korean children who are diagnosed and registered with developmental disorders reached 183,000 by December, 2011. Children with autism spectrum disorder (ASD) increased from 21,471 (in 2005) to 26,339 (in 2011). Thus, about 800 children have been diagnosed with ASD every year. The purpose of this study is to select and to develop tools assessing problematic behaviors in children with development.

Methods: We attained the approval of the BPI author and performed translation and back translation. We reviewed the translated BPI items by the author and translators and examined cultural variations and other practical matters while completing the questionnaires with caregivers to make necessary modifications of the Korean version of the BPI.

To test validity (face validity, construct validity and concurrent validity) and reliability (inter-rater reliability, test-retest reliability, internal validity) of the Korean version of the BPI, we obtained social and demographic information and completed the Korea-Scales of Independent Behavior- Revised (K-SIB-R), and CBCL. Test-retest was performed 2 weeks after the first test with several caregivers who participated at the baseline.

Results: The author of BPI agreed upon a non-commercial use of BPI, and validity and reliability were verified. Inter-rater reliability was shown to be highly reliable [$r = 0.992$ (95 % CI = 0.984–0.997): SIB subscale items, $r = 0.988$ (95 % CI = 0.978–0.994): Stereotyped Behavior subscale items, $r = 1.000$: Aggressive/Destructive Behavior subscale items]. Also, test-retest reliability analysis (SBI subscale items : $r = 0.233$, Stereotyped Behavior subscale items: $r = 0.625^{**}$, Aggressive/Destructive Behavior subscale items: $r = 0.907^{**}$) exhibited several significant results. As for the results for concurrent validity for subscale items of BPI-01 and scales of SIB, the correlations between SIB and BPI-01 subscales are as follows: Self-harm, $r = 0.6363^{***}$, Stereotyped behavior, $r = 0.357^{***}$, and Aggressive/Destructive Behavior, $r = 0.672^{***}$.

Discussion: ASD children at high risk for severe behavioral problems can be identified and provided with more specialized treatment by introducing the managing protocols. Moreover, increased awareness of parents or caregivers, decreased prejudice and stigma, and better treatment compliance are expected to bring about better outcome for these children.

Behavior problems in ASD can be caused primarily by ASD symptoms and other secondary factors. Results of this study will help other researchers and other clinicians attain important finding on behavior and decision making in ASD children and further broaden the current understanding of ASD.

PM-013 Assessment of maladaptive personality functioning

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The diagnostic of personality disorder (PD) is in transition. First, the dimensional severity approach is gaining acceptance over the

traditional categorical approach because of numerous problems concerning the validity and the acceptance of the diagnoses. Second, the prototype approach to define and classify current PD is questioned fundamentally and a shift to basic personality functions defining the core of PD in general is in intense international discussion. Third, the life-span approach promotes the inclusion of children and adolescents to overcome the artificial limitation by simple life age to obtain and denote clearly pathological development.

This symposium has its focus on the different models to define the central personality functions and to assess them in adolescents, including empirical results for psychometric properties of the presented inventories. The first talk introduces an interview, the second talk a self-report questionnaire to assess personality functioning in adolescents according to the descriptions given in the research section of DSM-5. The third talk presents alternative procedures referring to the revised multiaxial system of operational psychodynamic diagnosis OPD-KJ2 and the symptom oriented questionnaire BPFSC-11. The last talk focuses on the personality function “identity” in an inpatient population with personality disorders.

Keywords: Personality functioning, Assessment, Personality Disorder, Identity, Adolescence.

Assessment of the “Levels of Personality Functioning” in adolescents with the self-report questionnaire LoPF-QA to evaluate the severity of dysfunctional personality profiles and to detect emerging Personality Disorders”.

Kirstin Goth, Christian Schrobildgen, Marc Birkhoelzer, Susanne Schlueter-Mueller, Klaus Schmeck
Psychiatric University Clinics (UPK) Basel.

Screening for Personality Disorder—Assessment of personality structure and Borderline personality features with the questionnaires OPD-KJ2-SF and BPFSC-11”.

Christian Schrobildgen, Marc Birkhoelzer, Susanne Schlueter-Mueller, Klaus Schmeck, Kirstin Goth.

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PM-014

Association between appearance-based rejection sensitivity and body dysmorphic disorder symptoms in Japanese university students

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Objectives: Appearance-based rejection sensitivity (appearance-RS) was characterized by anxious concerns and expectations about being rejected based on one’s physical attractiveness (Park, 2007). Recent studies revealed that appearance-RS uniquely predicted the body dysmorphic disorder (BDD) symptoms controlling for other related variables in university students. However, there were no studies about the association between appearance-RS and BDD symptoms in Japan. In the present research, we aimed to investigate the association between appearance-RS and BDD symptoms controlling for Social Anxiety Disorder (SAD) symptoms in Japanese university students.

Method: A total of 279 students (Mean age = 19, SD = 1.4, 179 women, 100 men) took part in this study. They completed the questions about their demographic characteristics (age and gender), the Japanese short version of Appearance-based Rejection Sensitivity Scale (Tanaka et al. 2014), the Japanese version of Body Image Concern Inventory (Tanaka et al. 2010, 2015), the short Fear of

Negative Evaluation scale for Japanese (Sasagawa et al. 2004) and the Japanese version of Liebowitz Social Anxiety Scale (LSAS-J; Asakura et al., 2002). The reliability and validity of all questionnaires were confirmed in each previous study. To examine the effect of appearance-RS to BDD symptoms, we carried out a series of hierarchical regression analysis. At step1, we entered gender and SAD symptoms variables. At step2, we entered appearance-RS to investigate whether adding this variable significantly improved model fit.

Results: A hierarchical regression analysis revealed that appearance-RS was uniquely accounted for 12 % of BDD symptoms after controlling for gender and SAD symptoms ($F [1, 273] = 73.24, p < 0.001$). In step2, gender ($\beta = 0.29, t = 6.85$), fear of negative evaluation ($\beta = 0.25, t = 4.70$), and appearance-RS ($\beta = 0.44, t = 8.56$) significantly predicted BDD symptoms ($p < 0.001$). Fear ($\beta = 0.03, t = 0.38, p = 0.71$) and avoidance ($\beta = 0.00, t = 0.05, p = 0.96$) assessed by LSAS-J did not predict BDD symptoms significantly.

Conclusion: Our results indicated that appearance-RS was the key predictor variable for predicting BDD symptoms in Japanese university students.

Keywords: appearance-based rejection sensitivity, body dysmorphic disorder, social anxiety disorder, Japan.

PM-015

Association between bullying experiences and suicidal behaviors of adolescents in South Korea

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Objective: School bullying has been identified as a worldwide problematic behavior among adolescents, affecting school achievement, social skills, and psychological well-being for both victims and perpetrators. School bullying is not a recently newborn phenomenon but types and characteristics have been differed by time and culture. This study aims to examine the structure of peer bullying types at school in South Korea with relatively large sample. Also, this study attempts to find the causal effects of these experiences to suicidal behaviors including suicidal ideation and suicidal attempt, by controlling compounding factors more accurately. We hypothesize that there are two distinctive bullying types, overt and covert, and both types differently affect on adolescent’s suicide ideation and attempt.

Method: This study uses initial assessment data of children and adolescents who visited 31 local mental health centers in Gyeonggi province in South Korea. The sample size was 4410. To examine the structures of peer bullying experiences, latent class analysis (LCA) was used to classify the participants’ experiences with bullying. Then, the propensity scores adjusted binomial logistic regression has been conducted to find the causal relationship between bullying types and suicidal behaviors.

Results: Through the latent class analysis on the experiences with bullying, it is revealed that there are two distinct bullying types of physical and non-physical bullying. We can find that the adolescents experiencing bullying group is 3.05 times more likely to conduct suicide attempts than the non-experienced group. Non-physical bullying accompanying the high prevalence of cyber bullying also makes victims 2.94 times more likely to conduct suicide attempts than the non-experienced adolescents.

Conclusions: Different intervention strategies are required to the two distinct types of bullying, including different set of bullying items.

This study reveals that two types of bullying have great harmful effects on self-destructive behaviors such as suicide behaviors in common. Therefore much attention should be paid to 'hidden' types of non-physical bullying as long as the traditional physical bullying in school.

PM-016

Associations between problematic sexual behavior of children and psychiatric symptoms and diagnoses: an epidemiological study

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Even though since the early 50s of the last century, sexual behavior of children in general has been known as common behavior, in clinical practice it seems to be a very problematic field. There, we see a gap not only in knowledge of normal sexual development but in the link to psychiatric abnormality. In the last years, we find an increasing research on sexual behavior of children, not just related to sexual abuse but also to other forms of psychiatric-associated behavior. Various mechanisms seem possible to connect both domains of problem behavior. The present study explores the nature and the scope of the association in German children.

Sample: The sample comprises of all children aged 5–8 years who were treated at the Clinic for Child and Adolescent Psychiatry of the University of Rostock between 2006–2010. The only exclusion criterion was a known or suspected sexual abuse. 142 children with a wide range of psychiatric diagnoses were included.

Method: Using the CBCL (Child Behavior Checklist 4–18, Achenbach 1991) and the CSBI (Child Sexual Behavior Inventory, Friedrich 1997), the behavior of every child was rated by parents. Psychiatric symptoms and diagnoses were obtained as well. The statistical analyses used Chi² and T-tests for independent samples.

Results: Disregarding the degree of severity of psychiatric symptoms, we found a significant correlation between sexually deviant behavior and psychiatric burden in general. Searching for specific relations we analyzed the type of sexual behavior (directed to themselves vs. to other people) and the psychiatric specifics (internalizing vs. externalizing behavior, diagnoses). Even though we did not find the expected relation to isolated diagnoses, some results seem to confirm the hypothesis that high degrees of deviant sexual behavior problems are associated with early forms of delinquent behavior. Problematic sexual behavior appears to be a part of psychiatric symptoms already early in life. These outcomes seem to match the results from adolescent and adult studies, yet more research concerning the patterns and meaning in early childhood has to be conducted.

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PM-017

At the end of the line: casuistic study of paediatric suicides in the north of Portugal

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Introduction: According to some studies, suicide is among the leading causes of death in adolescents and young adults. Worldwide, there are nearly 900,000 suicides each year; over 200,000 referring to young people. Either the prevalence or the suicide methods vary according to the gender and the sociocultural context. It is considered that suicide is more common in adolescents with psychiatric problems, history of substance abuse, difficulties in socializing with family and peers, poor school performance and in those exposed to suicidal behaviour. Therefore, considering that some suicide victims don't have a history of attending Psychology or Child and Adolescent Psychiatry consultations, subsequent evaluation of the suicidal context is extremely important so that future preventive measures can be taken, avoiding many early deaths.

Objectives: The purpose of this study is to characterize the context of adolescent suicides (including age, gender, method and psychiatric history), evaluated throughpost mortem examinations at the Oporto Delegation of the National Institute of Forensic Medicine.

Methods: Data base research of adolescent suicides aged below 18, from 2009 to 2014, at the Oporto Delegation of the National Institute of Forensic Medicine.

Results: The sample was composed by eight adolescents, aged between 14 and 17 years old; five males and three females. In regard to the method used to perform the act, we registered: hanging, use of a firearm, jumping off a bridge, carbon monoxide intoxication and being hit by a train. Only two adolescents presented risk factors for suicide.

Conclusions: The sample size may be underestimated, as some cases may not have been evaluated by the forensic services. Although the small sample size doesn't allow us to generalize conclusions, our results are similar to those in the literature regarding gender frequencies and suicide method. The results also show that it is important to be alert to the presence of psychopathology and other risk factors for suicide.

Keywords: Adolescents, Suicide.

PM-018

Attitudes and opinions towards electroconvulsive therapy among adolescents with schizophrenia spectrum disorders

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Background: Most studies examining the efficacy of Electroconvulsive therapy (ECT) in children and adolescents have shown benefits in the treatment of schizophrenia spectrum disorders (SSD). Despite this and the relatively low incidence of relevant adverse events (Bloch et al. 2008; Taieb et al. 2002), it is not frequently used in this population. This may be due, among other reasons, to the lack of knowledge about the treatment and its adverse events, and the negative perception of the treatment by the general population, and even the professionals themselves.

Objectives: The aim of the study was to evaluate the attitudes regarding ECT, of a sample of adolescents treated with ECT, and to compare their opinion with a sample of adolescents with SSD treated with antipsychotics only.

Methods: 19 patients diagnosed with SSD between 2003–2012 treated with ECT when they were under 18 years old (ECT group), were compared to a sample of 21 patients, also diagnosed with SSD during the same period, treated only with antipsychotics (Non-ECT

group). A self-administered questionnaire of 48 and 26 items was administered to patients in the ECT group and the Non-ECT group respectively. The questionnaire is a Spanish translation of the one used by Walter (1999) with his permission.

Results: A total of 77.8 % of the adolescents in the ECT group believed that the ECT had helped them and a 72.2 % also reported that the illness was worse than the medication or the ECT treatment. An 84.2 % of them would agree to the treatment right away or if medications did not work. If we compare both groups, a 63.2 % of patients in the ECT-group thought that ECT was safe, while only the 4.8 % of the patients in the Non-ECT group thought it was safe and 81 % did not know the answer ($\chi^2 = 15.99$, $p < 0.001$). A 57.9 % of patients in the ECT-group reported that it does not leave permanent damage and a 26.3 % did not know the answer, while in the Non-ECT group a 4.8 % reported that ECT does not leave permanent damage and a 76.2 % did not know the answer ($\chi^2 = 14.74$, $p = 0.001$).

Conclusions: Most patients who received ECT had a positive opinion about the treatment, and thought that it was a safe treatment, while most patients who did not receive ECT did not know the answer to the questions.

Keywords: Electroconvulsive therapy, Schizophrenia.

PM-019

Augmentation therapy with aripiprazole in treatment-resistant ocd in childhood: which SSRI to choose, fluoxetine or sertraline?

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Background and Aim: Obsessive-compulsive disorder (OCD) in childhood is generally treated with selective serotonin reuptake inhibitors (SSRIs) and/or clomipramine and cognitive behavioral therapy (CBT). But, about half of the cases are treatment resistant. Augmentation with several agents were also evaluated. This study was aimed to evaluate the efficacy of aripiprazole as an augmentation agent, and also to evaluate the efficacies of Fluoxetine and Sertraline as SSRIs.

Methods: Forty-four children (13 girls, 31 boys), who are non-responders to treatment with at least two types of SSRIs and CBT, were administered a 12-week of augmentation. Treatment outcomes were evaluated by childhood Yale-Brown Obsessive Compulsive Scale (Y-BOCS), and Clinical Global Impression-Severity and Improvement (CGI-S and CGI-I) scales.

Results: Children with a mean age of 12.2 ± 3.0 years showed significant improvements in symptoms after 12 weeks of aripiprazole augmentation and SSRI treatment, which were evaluated by significant decreases in symptomscores in Y-BOCS, and improvements in CGI-I scores. Sex was found to be effective on treatment response, and fluoxetine was found to be superior to sertraline in augmentation therapy.

Conclusion: Aripiprazole treatment is an effective strategy in refractory OCD cases. Treatment response may vary between sexes, and SSRI types, but both sexes should benefit from either of the SSRIs augmented with aripiprazole.

Keywords: Aripiprazole, Augmentation, Obsessive-compulsive disorder.

References

1. Walter G, Koster K, Rey JM (1999) Electroconvulsive therapy in adolescents: experience, knowledge, and attitudes of recipients. *J Am Acad Child Adolesc Psychiatry* 38(5):594–599.

2. Taieb O, Flament MF, Chevret S et al (2002) Clinical relevance of electroconvulsive therapy (ECT) in adolescents with severe mood disorder: evidence from a follow-up study. *Eur Psychiatry* 17:206–212
3. Bloch Y, Sobol D, Levkovitz Y, et al (2008) Reasons for referral for electroconvulsive therapy: a comparison between adolescents and adults. *Australas Psychiatry* 16:191–194.

PM-020

Autism spectrum disorder symptoms in children with adhd: association with parent, couple and family functioning

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Background: Autism spectrum disorder (ASD) symptoms are common in children with Attention Deficit/Hyperactivity Disorder (ADHD). Little is known about the association between ASD symptoms in children with ADHD and parent, couple and family functioning.

Objectives: To explore the association between ASD symptoms in children ADHD and: (1) parent mental health, (2) family quality of life, (3) couple conflict and couple support and (4) parenting approaches. We hypothesized that greater ASD symptoms in children with ADHD would be associated with (1) poorer parent mental health, (2) poorer family quality of life, (3) greater couple conflict and less couple support and (4) more negative parenting behaviours.

Methods: Participants were 6–10 year old children (164 ADHD; 198 Control) attending 43 schools in Melbourne, Australia, who were participating in a longitudinal cohort study. ADHD was assessed in two stages using the parent and teacher Conners' 3 ADHD index and the DISC-IV. ASD symptoms were identified using the Social Communication Questionnaire (SCQ). Outcome variables were parent mental health (Kessler 6), family quality of life (Child Health Questionnaire Family Impact Scale), and scales assessing couple conflict, parenting support and parenting behaviours. Linear regression was used to examine continuous outcomes.

Results: There was some evidence that greater ASD symptoms in children with ADHD were associated with poorer parent mental health ($p = 0.07$). As predicted, greater ASD symptoms in children with ADHD were associated with poorer family quality of life across all three domains; emotional impact ($p = 0.001$), family impact ($p < 0.001$) and time impact ($p < 0.001$). Greater ASD symptoms were associated with greater couple conflict ($p = 0.04$) and less couple support ($p = 0.04$). Although greater ASD symptoms in children with ADHD were associated with angry parenting behaviours ($p = 0.04$), they were not associated with other parenting domains including consistency ($p = 0.22$), parental warmth ($p = 0.89$), or parental self-efficacy ($p = 0.54$).

Conclusions: ASD symptoms in children with ADHD is associated with poorer family quality of life, greater couple relationship difficulties and more angry parenting behaviours. This highlights the importance of assessing for ASD symptoms in children with ADHD to ensure appropriate intervention for these symptoms, and to consider support services for parents.

PM-021**Body image in adolescents with non-suicidal self-injury behaviours: a comparison with eating disorder diagnosis**

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Objectives: Body image is defined as a multi-dimensional set of thoughts and feelings related to the physical experience, appraisal of, and satisfaction with one's body (Cash & Pruzinsky 2002). It plays a prominent role as a risk factor for several types of adjustment problems and disorders with adolescent onset, such as non-suicidal self-injury (NSSI) behaviours and eating disorders. Orbach (1996) theorized that negative bodily experiences and attitudes, as body dissatisfaction and/or disregard, reduce self-preservative functions, and contributes to a greater propensity for self-harm. This has been validated among self-destructive acts such as NSSI and disordered eating behaviours. The importance of body image as a developmental risk factor for NSSI as well as eating disordered behaviours has been largely studied but differences concerning body image among adolescents with NSSI behaviours and adolescents with eating disorders remain largely unknown.

The current study aims to evaluate the body image in a clinical sample of adolescents with NSSI behaviours and find out whether there are significant differences in body image in adolescents with an eating disorder without NSSI behaviours.

Methods: We selected a group of 20 female adolescents with NSSI behaviours and compare them with a group of 20 female adolescents with an eating disorder without NSSI behaviours. A questionnaire with socio-demographic and health variables was applied. Body image was assessed by The Body Shape Questionnaire (BSQ) which quantifies body dissatisfaction.

Results: Consistent with previous research, the adolescents with NSSI behaviours reported high levels of body dissatisfaction. Preliminary results suggests some specificities among this population relating to eating-disordered adolescents.

Conclusions: Despite its limitations, this study provide evidence that body image may act an important role in NSSI behaviours in adolescents. Also, it is imperative to develop a comprehensive understanding of how body image is differentially related to various forms of self-destructive behaviours, such as NSSI behaviours and eating disorders, and identify mechanisms through which such disturbances influence the likelihood of engaging in self-destructive behaviours.

PM-022**Bullying, psychopathology and social issue: a case report**

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Introduction: Facing the increasing impact that bullying has experienced in recent years, there is also an increasing demand for attention in child and adolescent mental health services because of the psychopathological factors related with this phenomenon, such as anxiety, insomnia, PTSD or depression. It is well known that students involved in these situations, from any of the roles, are at an increased risk for

psychosocial disorders and might require psychiatric care. The approach should be aimed at prevention, with the perspective of human rights and conviviality. It must include the family and the parenting styles, since bullying is considered to be the reflection of upbringing based on the extremes, from overprotection to high permissivity.

Objectives: To describe a clinical case of suspected bullying. To analyse the psychopathological factors related. To expose the action protocol followed in this case.

Methods: we report the case of a minor who claimed to have received insults and demonstrations of contempt from her classmates during all year school. This is why the parents took her to another school, where the situation happens again. The family finally chose not to take her to school in order to protect her from such mistreatment. An analysis of the psychopathological aspects of this case is made from our mental health service. Insulting WhatsApp messages were shown during the clinical interview with her and her parents. In addition, comments and attitudes were described as intentionally offensive according to their point of view. An investigation to confirm the veracity of the event was also carried out, and the valuation methods used include the AF5 multidimensional scale of self-concept, the Personality Questionnaire for children and adults (EPQ-J), the Children's Depression Inventory (CDI) and the Raveñs Progressive Matrices Test. The final aim was to promote the integration with her peers including a proper school attendance.

Conclusions: In cases of bullying is essential an early and rigorous approach, not magnifying it but neither denying it. This approach must include the psychopathological aspects, with a proper identification of related factors and their redefinition in the constant change of modern society.

PM-023**Caarms as a diagnostic tool to identify children and adolescents at ultra high risk of psychosis: a feasibility study in Italy**

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The past 20 years have seen the evolution of the construct of a clinical high-risk (HR) state for psychosis aiming at identifying individuals with potentially prodromal symptoms. The CAARMS (Comprehensive Assessment of At Risk Mental State), created by Yung et al. in 2005, is one of the most used tools to diagnose individuals in a putative pre-psychotic phase. It detects attenuated psychotic symptoms (APS), brief limited intermittent psychotic symptoms (BLIPS), genetic risk and deterioration syndrome (GRD). The feasibility of this approach in children and adolescents is still underinvestigated.

Objectives: We address the feasibility of the HR approach within the framework of Italy's national child and adolescent neuropsychiatry services by using the CAARMS.

Setting: Neuropsychiatric unit, Neurological National Institute C. Mondino, Pavia, Italy.

Methods: We used the Italian version of CAARMS (translated in Italian in 2007 and validated on the Italian population in 2012 by Fusar-Poli et al.) to determine if help-seeking patients met one of the HR criteria at baseline.

Results: There were no missing data. CAARMS-trained Child and Adolescent Psychiatrists evaluated 56 patients (52 % males; mean age 15.58 years, SD 1.48, range 12.6–17.8), 85.7 % referred from the Neuropsychiatry ward, 10.7 % from outpatient services, 3.6 % from

private practitioners. 50 % had low socio-economic status, 26.8 % medium, 23.2 % high. All but two successfully completed the interview (mean time 72.8 min, SD 20.82) over 2 sessions without interruptions or subjective discomfort. 41.0 % met inclusion criteria for HR (4 GRD, 18 APS, 1 BLIPS), 17.8 % were diagnosed psychotic, and 41.0 % were not at risk. Mean CAARMS scores on the diagnostic subscales (and SD) were as follows: unusual thought content I (intensity) 2.05 (SD 2.07), F (frequency) 2.21 (2.09); non-bizarre ideas I 1.85 (1.74), F 2.6 (2.00); perceptual abnormalities I 2.69 (1.95), F 2.4 (1.68); disorganised speech I 1.98 (1.63), F 2.76 (2.16). Mean SOFAS score (Social and Occupational Functioning Assessment Scale) was 51.30 (SD 13.86) and it was significantly more impaired ($p = 0.0199$) in the HR subjects (mean 49.91, SD 10.89) than in the non-HR ones (mean 57.69, SD 12.60).

Conclusion: administration of the CAARMS to samples of children and adolescents with putative prodromal psychosis appears feasible and this assessment could easily be integrated into Italian neuropsychiatry services. Further research in our cohort will establish the prognostic validity of the HR criteria and their applicability to the special needs of children and adolescents.

Funding: Italian Ministry of University and Research.

PM-024

Can positive family factors be protective against the development of psychosis?

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Introduction: Psychosis is a familiar disorder with genetic and environmental factors involved. Family negative factors have been linked to poor prognosis of psychosis.

Aim: Relate environment and family history of psychosis with development of psychosis.

Method: 193 children-adolescents with first psychotic episode were included in the study, defined by the first occurrence delusions/hallucinations. Patients and at least one relative were interviewed about socioeconomic status, family history of psychosis and familiar environment was evaluated with the Family Environment Scale (FES). We used U Mann-Whitney and Kruskal Wallis proof and logistic regression mode.

Results: The mean of age was 15.37 (DT = 1.80). The control group displayed higher socioeconomic status ($\chi^2 = 14.45$, $p < 0.01$). There was more psychotic family history between 1st and 2nd relatives of patients than in controls (PG: $\chi^2 = 29.74$; $p < 0.001$; CG: $\chi^2 = 5.24$; $p < 0.05$). The control group with psychotic antecedents receives more

positive support compared with patients with and without psychotic antecedents (FES) (CGA: $Z = -3.98$; $p < 0.001$ and PNA: $Z = -3.69$; $p < 0.001$). The patients perceived more negative environment than controls with psychotic family history ($Z = -2.70$; $p < 0.01$).

Conclusions: The negative family environment and family history of psychosis are related to the development of psychosis. The positive family environment, the best socioeconomic status and intellectual interests are protective factors for developing psychotic episodes in children-adolescents. Therefore, our results support the importance of considering both family history of psychosis and family environment in the early stages of psychosis.

Bibliography:

González-Pinto A1, Ruiz de Azúa S, Ibáñez B, Otero-Cuesta S, Castro-Formieles J, Graell-Berna M, Ugarte A, Parellada M, Moreno D, Soutullo C, Baeza I, Arango C (2011) Can positive family factors be protective against the development of psychosis? *Psychiatry Res* 30; 186(1):28–33.

PM-025

Cannabis addiction, genetic load and psychosis

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Objective: Explain through a clinic case, the results of coordinating several psychotherapeutic teams. Community psychiatry.

Method: Clinical interview.

Therapeutic intervention.

Results: Personal antecedents: The patient came to our CAMHS in 2007 presenting bad behaviour with lots of aggressions towards the mother and sister. It looked like related to parental separation. After that, they started, weekly, Family Therapy from Social Services in 2013.

Family antecedents: grandfather suffers from schizophrenia, mother suffers from depression and anxiety, father suffers from schizophrenia and sister suffers from bulimia. All of them are on psychiatric attendance.

Actual symptomatology: From the beginnings of 2014, we found an attentive 14 year old girl, who collaborates in the interview, strange contact, appropriate language, some motiveless laughs with previous whispering. Cannabis consumer (2 to 12 joints a day), aggressiveness towards mother and sister daily, great difficulty to control impulses. Bulling against their partners at school. Sensoperceptive distortion when high cannabis consume, visual and kinesthetic hallucinations, paranoid thoughts without structure. Lack of emotion. Disocial personality. Conciliation insomnia. Good appetite. No insight.

We do psychoeducation in schizophrenia. We contact with a specific centre to treat addictions. We start paliperidone in a low dose to help her with the psychotic symptoms and with her conduct disorder. We talk to the family therapist and to the psychologist at school.

Conclusions: After coordinating the three services that our patient was involved in, we have got that the child improves in many areas. She left the addiction to cannabis after having daily urine controls and being motivated by therapists and family. Irritability, paranoidism, conduct disorder and low tolerance to frustration also improve.

We believe that time to coordinate and trust in community psychiatry, is essential and necessary if we want to help Young people to function in all areas.

Bibliography:

In: Pumariega A, Winters N editor. Part one: conceptual foundations of systems of care. The handbook of child and adolescent systems of care: the new community psychiatry. San Francisco (CA): Jossey-Bass; 2003

PM-026**Cannabis use and psychopathology in adolescent psychiatric inpatients**

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Introduction: Prevalence of substance use in adolescents has become a relevant public health issue, being cannabis the most frequently used. 33.6 % of adolescent students aged 14–18 years reported they had used cannabis at least once in their lifetime (ESTUDES, 2012) in Spain in 2012. Psychiatric disorders (conduct and psychotic disorders, depression, anxiety) and impairment in global functioning have been associated to cannabis use during adolescence.

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Keywords: Cannabis, Adolescence, Conduct disorders, Psychosis.

Objectives: Study the prevalence of cannabis use in adolescent psychiatric inpatients and the psychopathology associated.

Methods: A sample of adolescent psychiatric inpatients admitted to Hospital Universitario Basurto (Bilbao) and Hospital Universitario Donostia (San Sebastian), Spain, from May to October 2011 were included. Sociodemographical data, history of cannabis use and psychopathology were assessed through medical interview and questionnaires administered to inpatients and parents (CBCL, YSR, ADIS and EEAG). Descriptive and bivariate statistical analysis (Chi square test, Student's t-test) were performed.

Results: A total of 48 adolescents (56.25 % male; mean age: 15.33; SD=1.12) were included. 58.33 % had used cannabis at least once. Cannabis use showed significant association with other drugs use: 64.3 % of cannabis users had used other drugs vs 5.3 % of non-users ($p = 0.000$). Psychiatric diagnoses showed statistically significant differences between cannabis users and non-users: most common diagnoses in cannabis users were Conduct Disorders (31 %) and Psychotic Disorders (27.6 %) vs Anxiety/Adjustment Disorders (21 %) and Eating Disorders (18.8 %) in non-users ($p = 0.012$). There was significant difference ($p = 0.034$) between the two groups in severity measured by EEAG scale (mean= 41.11, SD 13.27 in users vs 50.00, SD 14.29 in non-users). CBCL showed statistically significant differences ($p = 0.032$) between both groups in Delinquent Behaviour subscale. Analysis of YSR showed differences in Attention Problems ($p = 0.006$), Delinquent Behaviour ($p = 0.002$) and Externalizing Problems ($p = 0.04$), showing cannabis users higher severity in these subscales.

Conclusions: Cannabis use in adolescent psychiatric inpatients is a common habit associated to conduct and psychotic disorders, delinquent behavior and externalizing problems, and impairment in global functioning.

PS-027**Change of psychological characteristics after join the army according to internet addiction tendency in Korean young male soldiers**

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The aim of this study was to find out psychological changes associated with internet addiction between before and after military drill in young male army recruits.

All 1091 participants were army recruits aged from 19 to 22 years that participated in 5 weeks military drill. They were given some self-reported questionnaires [Sociodemographic questionnaires, Young's Internet Addiction Scale (IAS), State-Trait Anxiety Inventory (STAI), Beck Depression Inventory (BDI), Barratt Impulsiveness Scale (BIS), Attention-Deficit/Hyperactivity Disorder Self-Rated Scale (ASRS)]. They were divided into internet addiction tendency group and non-addiction group according to IAS score. And the degrees of internet addiction tendency, depression, anxiety and impulsiveness were checked with IAS, STAI, BDI, BIS, ASRS before and after military drill.

The result from paired T-test shows that IAS, STAI, BDI, BIS, ASRS scores decreased after military drill in both non-addiction group and internet addiction tendency group. The result from repeated measures ANOVA shows that there is interaction effect between the changes of ASRS-hyperactivity ($F = 23.437, p < 0.001$), ASRS-impulsiveness ($F = 4.896, p = 0.027$), BIS-total ($F = 4.057, p = 0.044$), BIS-motor impulsiveness ($F = 13.609, p < 0.001$) scores and groups. The result from generalized estimating equation presents that internet addiction tendency is associated with ASRS-inattention ($\beta = 0.075, p < 0.001$), ASRS-hyperactivity ($\beta = 0.092, p = 0.002$), STAI-trait anxiety ($\beta = 0.046, p < 0.001$), BIS-motor impulsiveness ($\beta = 0.119, p = 0.028$).

The results present that psychopathologies such as internet addiction tendency, depression, anxiety, impulsiveness may be stabilized after military drill regardless of groups. Internet addiction tendency may be related with ASRS-inattention, ASRS-hyperactivity, STAI-trait anxiety, motor-impulsiveness. So these findings may be considered in treatment of internet addiction related to impulsiveness control.

PM-028**Characteristics and management of agitation in adolescent psychiatric patients**

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Background: In Pediatric Psychiatry, estimating the prevalence of "agitation" is difficult due to the lack of standard studies or systematic data collection.

Objective: To assess the 3 month prevalence, characteristics and management of episodes of agitation in child and adolescent psychiatric patients attended in a Psychiatric Emergency Room or in an Acute Inpatient Unit.

Materials and methods: The number of episodes of acute agitation presenting in a Psychiatric Emergency Room or admitted in an Acute Inpatient Unit were registered. 37 patients were included (22 male, 15 female). Mean age was 14.27 ± 2.8 years (range 8–17 years).

Psychiatric diagnosis was Autism Spectrum Disorder (n = 14; 37.8 %), Behavioral Disorder (n = 9; 24.3 %), Schizophrenia (n = 8; 21.6 %), Bipolar Disorder (n = 1; 2.7 %), Personality Disorder (n = 1; 2.7 %) and Other diagnoses (n = 4; 10.8 %). 51 % of the patients were on antidepressants, 56.8 % on antipsychotics, 32.4 % on mood stabilizers and 37.8 % on hypnotics.

Results: Before Intervention: Most patients (n = 33; 89.2 %) presented the agitation episode in the Acute Psychiatric Inpatient Unit, and 35 % of the episodes occurred on Monday. Cannabis use was present in 18.9 % of the episodes. The percentage of patients rated from moderate-severe to extreme in each PANSS-EC item was: 51.3 % in poor impulse control, 62.1 % in Tension, 62.1 % in Hostility, 62.1 % in Uncooperativeness and 54 % in Excitement. CGI-severity at baseline was from “Markedly ill” to “Among the most extremely ill” in 56.7 % of the patients.

Intervention: The agitation episode was managed with Physical Restraint (29.7 %; n = 11), Mechanical Restraint (54.1 %; n = 20), Isolation (62.2 %; n = 23) and Verbal de-escalation (62.2 %; n = 23). Pharmacological treatment was given to 43.2 % (n = 16) of the patients, being the route of administration both oral (50 %) and intramuscular (50 %). 32.2 % (n = 12) of the patients received a Second Generation Antipsychotic, 5.4 % (n = 2) a First Generation Antipsychotic, one patient received both First and Second Generation Antipsychotics and one patient received benzodiazepines.

After Intervention: A decrease in PANSS-EC was noted after the intervention (22.5 ± 5 before and 11.4 ± 3.7 after intervention; $t = 11.9$; $df = 36$; $p = 0.000$; Paired-t test). CGI-Improvement showed that 86.4 % of the patients were “Much Improved” or “Very much Improved”.

Conclusions: Our results are in agreement with the few data reported in the literature concerning adult patients, and confirm the agitation is an important challenge in adolescent psychiatry

PM-029

Child abuse and neglect: a 10 years of experience of multidisciplinary teams of the Child Protection Center of Zagreb

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The main aim of of the Child Protection Center of Zagreb is to provide an efficient and systematic help to abused and neglected children and their families. The multidisciplinary teams of the Child Protection Center of Zagreb include experts specially trained in the field of child trauma, and they consist of psychologists, psychiatrists, social workers, pediatricians, special education teachers, nurses and lawyers. In this paper we will demonstrate the work and experiences of our Center with an emphasis on a multidisciplinary approach in working with traumatized children, including children with experience of abuse and neglect, but also those who are at risk. This paper will also include a review of our experience in cooperation with other institutions involved in the problem of abused children and the importance of prompt communication between different systems. Furthermore, in this paper we will present the data on the prevalence of abuse and neglect, as well as some characteristics of patients in the Center, such as socio-demographic data, developmental characteristics and symptoms, but also provided forms of assistance. This data will be interpreted and observed from the perspective of modern diagnosis and treatment options.

Keywords: Abuse, Neglect, Child protection, Multi-disciplinary teams.

PM-030

Child and adolescent OCD symptom patterns: a factor analytic study

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Background: OCD is a heterogeneous disorder with regard to symptom presentation, course and prognosis. A few studies have tried to identify symptom based subtypes of OCD in children and adolescents, and found it to contain 4–5 factors. There are several reasons for the different number of factors found, such as difference in methods used and limited sample sizes. Previous studies have applied factor analysis on CY-BOCS categories, but this study is the first to evaluate CY-BOCS on item level in a sample of children and adolescents. This study based on a large sample will be a valuable addition to the previous studies by assessing the stability of obsessive-compulsive symptom dimensions in children and adolescents.

Objectives: To investigate OCD symptom structure in children and adolescents in order to identify OCD subtypes. Evaluate if the factors found have a specific relation to co-morbid disorders and demographics.

Methods: This study was a part of the Nordic Long-Term OCD Treatment Study (NordLOTS).

Exploratory factor analysis was applied to the Children’s Yale-Brown Obsessive-Compulsive Scale (CY-BOCS) symptom checklist items in order to reveal latent factor structures. Confirmatory factor analysis was applied to assist in selection of the best fitting factor structure. The relation between specific factors, demographics and co-morbid disorders was examined by using regression analysis and factor scores. Data for 854 children and adolescents with OCD was included in the study and was collected from 24 different research units in Denmark, Sweden, Norway, Holland and USA.

Results and discussion: In the poster presentation, results will be presented and discussed. The importance of our findings for studies on OCD genetics and pathogenesis of symptoms will be discussed.

PM-031

Children and adolescents with bipolar spectrum disorder: symptom description and functional outcome

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Background: There has been a steadily growing interest in the clinical and public health implications of bipolar disorder (BD) affecting children and adolescents. Although different trends in diagnosis of BD in youngsters in Europe and the US may have been due to differences in diagnostic practices (Goodwin et al. 2007), research in BD in children and adolescents has also been neglected in Europe, and most knowledge to date comes from US studies, making it difficult to extrapolate findings to European clinical settings.

Objectives: To study a clinically representative sample of children and adolescents with BD (I, II, and not otherwise specified NOS). To compare clinical symptoms and functional outcomes between patients with BD- I and II and those with BD-NOS. Comparisons between patients with and without psychotic symptoms were also performed.

Methods: We evaluated 36 children and adolescents (7–17 years of age; mean \pm SD: 14.39 \pm 2.92) with BD and 28 healthy controls matched for age and gender. Participants were recruited at the Gregorio Marañón Hospital (Madrid, Spain). They were clinically assessed using the Positive and Negative Syndrome Scale (PANSS), Young Mania Rating Scale (YMRS), Hamilton Rating Scale for Depression (HDRS) and Children's Global Assessment Scale (C-GAS). DSM-IV diagnoses were obtained by means of the K-SADS-PL. BD-NOS diagnostic criteria from Birmaher et al. 2006 were used. Categorical variables were compared by means of Chi square tests. Quantitative variables were compared using parametric or non-parametric tests as appropriate. SPSS 20.0 was used.

Results: Patients with BD-NOS ($n = 10$) were significantly younger than those with BD-I and II (12.5 ± 2.59 vs. 15.12 ± 2.74 , $P = 0.007$) and had lower rates in the positive subscale of the PANSS (9.22 ± 2.99 vs. 17.32 ± 9.32 , $P = 0.01$). Patients with BD-NOS had comparable scores in other PANSS subscales and PANSS total score, YMRS, HDRS, and C-GAS. BD patients not showing psychotic symptoms ($n = 13$) were also younger than those with them (12.23 ± 2.80 vs. 15.6 ± 2.23 , $P < 0.0001$), with no other significant differences in clinical symptoms.

Conclusions: [ANNOTATION: ON '2015-01-12T08:41:00'

NOTE: 'El inicio ms temprano de la enfermedad en los NOS... y los que no tienen sintomatología... peor pronóstico??? Importancia de hacer un diagnóstico e intervención adecuada?'

NOTE: "[Children and adolescents fulfilling criteria for BD-NOS were as symptomatic and functionally impaired as those meeting full BD criteria. Research on youth with BD spectrum in European settings will contribute to improve clinical detection and development of treatment approaches for this challenging clinical population.

PM-032

Children born with very low birth weight have difficulties with sustained attention, but not response inhibition

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Children born with very low birth weight perform poorly on executive function and attention measures. Any difficulties with sustained attention may underpin impairments in performance on tasks measuring higher-order cognitive control. Previous sustained attention research in very low birth weight cohorts has used tasks that involve arousing stimuli, potentially spoiling the measure of sustained attention. The aim of this study was to compare the performance of very low birth weight and normal birth weight children on a well-controlled task of sustained attention. The Fixed and Random versions of the Sustained Attention to Response Task were given to 17 very low birth weight and 18 normal birth weight children. The very low birth weight group performed the Fixed and Random Sustained Attention to Response Tasks in a similar manner as the normal birth weight group on all measures except for the omission error and Slow Frequency Area under the Spectra variables on the Fixed Sustained Attention to Response Task. These measures index lapses in sustained attention that

may be underpinned by declining arousal. The very low birth weight group showed no response inhibition deficits. Omission errors and slow-timescale response time variability on predictable tasks may thus present sensitive indices of difficulties with sustained attention and arousal associated with premature birth and low birth weight.

PM-033

Clinical and socio-demographic correlates of conversion disorder in children and adolescents

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Conversion disorder is probably the most enigmatic diagnostic category in psychiatry and it continues to present a clinical challenge to clinicians. Majority of literature in the area of conversion disorder comes from the work done on adults. Most studies of conversion disorder in children are limited to case series and case reports. Despite the huge personal suffering and health resources implications of conversion disorder in children, this area remains neglected.

Keeping this in mind, a prospective clinic based study was conducted in the Child and Adolescent Guidance Clinic (CAGC), department of psychiatry, PGIMS, Rohtak, India. All the children who met the diagnostic criteria of conversion disorder as per DSM-IV-TR constituted the study sample. After obtaining the consent from the parents, various socio-demographic details were collected using a specially designed performa, and the clinical variables were assessed using Conversion Disorder questionnaire, a specially designed follow up questionnaire and Children Global Assessment Scale. All the children were assessed at intake, 2 weeks and 4 weeks.

During a period of 1 year, a total of 368 children and adolescents attended CAGC. Sixty-one children received the diagnosis of conversion disorder i.e. a prevalence rate of 16.6 %. More number of girls than boys were affected. Motor weakness (75 %) and pseudoepilepsies (70.5 %) were the most common presentations. la belle indifférence was seen in about one-fourth of cases.

Majority (95 %) of children had reported the presence of stress prior to the onset of illness. School related problems constituted the most common form of stress (75 %). Though the association with stressors was non-significant but the difference between boys and girls was statistically significant. Depression and anxiety were common comorbid psychiatric disorders. All the children were followed up at week 2 and week 4. 52.5 % of children showed complete remission at week 2 while 77 % had achieved remission at week 4. Only 2 % of children relapsed at week 4.

Acute onset of illness, shorter duration of illness, young age and comorbid anxiety were associated with good outcome.

This paper further discusses the impact of conversion disorder on child and his family.

Keywords: Conversion disorder, Children and adolescents, Clinical variables.

PM-034

Coenzyme Q10 deficiency and psychiatric comorbidity: a case report

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The coenzyme Q10 deficiency is a rare disease with a heterogeneous clinical and genetic presentation, which usually manifests in

childhood and whose most common clinical presentation usually consists of cerebellar ataxia. Five major clinical phenotypes were described: encephalomyopathy, cerebellar ataxia, severe infantile multisystem disease, nephropathy and myopathy isolated. The primary deficiency is due to defects in the biosynthesis of coenzyme Q10, while secondary deficiency is due to other causes.

Various neuropsychiatric symptoms were described in association with coenzyme Q10 deficiency, such as mental retardation. It has also been reported secondary deficiency as a side effect of treatment with some psychoactive drugs. But is not described as such psychiatric comorbidity, at least we have consulted on bibliographic databases.

Diagnosis is based on measurement of coenzyme Q10 levels in skeletal muscle biopsy. The treatment of this syndrome involves administering food supplements rich in coenzyme Q10. There is usually a clinical response to treatment, which makes diagnosis relevant.

We describe a case of a 17 year old affection coenzyme Q10 deficiency whose clinical phenotype corresponds to a myopathy and growth and weight retardation, which comorbidly presents an obsessive compulsive disorder, vocal tics and multiple motor tics and attention-deficit and hyperactivity disorder that begins in childhood. A family history of suspected coenzyme Q10 deficiency and diabetes mellitus type I, which is a common finding because this syndrome is associated with deficiencies in the glucose transporter GLUT-1.

The relevance of this case is that several comorbid psychiatric disorders were described for the first time on this rare disease.

PM-035

Comparison of physical health and mental status in Korea high school students lodging at a dormitory

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Background: In Korea, most people have believed that the graduation from famous university was very helpful to their future lives. because they long for the entrance of famous university, they want to live in famous high school dormitory to study hard. This renowned high school is divided into general and international high school. Because of strict school life and massive amount of study students do, students have huge physical and mental problems. Our study provides a comparison between physical health and mental status at a dormitory.

Methods: Between october and November 2014, 213 students (KIS; 123, SHS; 90) were enrolled. The study included the following: (1) individual school life (breakfast, snack, school class time, self studying time, exercise time, sleeping time), (2) physical health (neurologic, ophthalmic, auditory, respiratory, cardiovascular, gastrointestinal, urologic, dermatologic), (3) Zung self-rating depression and anxiety scale. Statistical analysis was performed using the Chi square test.

Results: There was no statistical difference between students from two schools of individual school life, self-rating depression and anxiety scales ($P > 0.05$). Depression and anxiety scale showed mild depressed students (44.7/40 %) and mild to moderate anxiety students (17.8/16.6 %) in KIS and SHS respectively. But for physical symptoms, KIS students were significantly troubled than SHS students: tremor (16.3/1.1 %), tinnitus (36.6/10 %), loss of hearing function (10.6/2.2 %), coughing (54.5/40 %), sputum (45.5/31.1 %), hoarseness (25.4/11.1 %), chest pain (21.1/7.8 %), edema (8.1/1.1 %), epigastric pain (20.3/8.9 %), vomiting (24.4/8.9 %), skin eruption (15.4/6.7 %) ($P < 0.05$).

Conclusions: Our study showed there was no mental status differences between both schools. But like psychosomatic symptoms, physical symptoms were more frequent prevalence in KIS students. This result can be construed that KIS students are more troubled in terms of physical symptoms due to geographic isolated situation, separated duration with family, strict school life in KIS. This conclusion draws the fact that more interest and detail care in school life will be necessary.

PM-036

Complex and unusual clinical presentation: pandas and pans case series

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Introduction: During the last decades, two different syndromes have been described: Pediatric autoimmune neuropsychiatric disorder associated with Streptococcus (PANDAS) and Pediatric acute-onset neuropsychiatric syndrome (PANS). They have a distinguished presentation pattern compared to a typical obsessive-compulsive disorder (episodic courses, early age of onset, psychiatric comorbidities) [1] and it is thought it is triggered via an autoimmune response. [2] Diagnosis of PANDAS needs a positive throat culture. Treatment includes antibiotics [1].

We aim to report a case series of patients with PANDAS/PANS treated in a university general hospital. Little data has been found regarding this topic in southern European countries.

Methods: A retrospective evaluation was performed on the 6 individuals with PANDAS/PANS detected in the Department of Child and Adolescent Psychiatry of Hospital Clínic of Barcelona throughout 7 years (2007–2014).

Results: We identified four females and two males, with a mean age of 10 years. All presented an abrupt onset of obsessive compulsive symptomatology and/or tics, associated with other neuropsychiatric symptoms and coinciding with a tonsillopharyngitis. A positive throat culture was obtained for Streptococcus Pyogenes in 3/5 subjects that we tested. In the other two, blood test showed elevated antistreptolysin O titers. Antibiotics were administered in association with psychiatric drugs. During the follow-up, four of them had relapses associated with a new throat infection. Antibiotic prophylaxis was initiated in three of them. As a result, no relapses were detected except in one subject, in the context of antibiotic prophylaxis cessation. Regarding personal history, three referred to having repeated respiratory tract infections in childhood. We detected autoimmune family antecedents in one subject and, in another, relatives with possible rheumatic fever.

Conclusions: The clinical picture of PANDAS and PANS can be disruptive. Early detection is essential. Patients show an appropriate response to antibiotics, often enabling a complete remission [1]. Some cases remain stable with antibiotic prophylaxis. It is remarkable the complexity of these cases and the importance of an individualized assessment.

In the management of PANDAS and PANS, further research is needed to identify risk groups, facilitating more effective early intervention and prophylaxis.

References

- Murphy TK, Patel PD, McGuire JF, Kennel A, Mutch PJ, Athill EP et al (2014) Characterization of the Pediatric Acute-Onset

Neuropsychiatric Syndrome Phenotype. *J Child Adolesc Psychopharmacol*

- Allen AJ, Leonard HL, Swedo SE (1995) Case Study: A New Infection-Triggered, Autoimmune Subtype of Pediatric OCD and Tourette's Syndrome. *J Am Acad Child Adolesc Psychiatry* 34(3):307–311.

PM-037

Conduct disorders in adolescents without structured families. Borderline spectrum symptoms and outcome at one year follow up

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Abstract:

Conduct disorders are highly prevalent among adolescents without structured families. The conduct disorders frequently resemble borderline personality disorders. Kaess, after carrying out a review in adolescents with borderline personality disorder noted that they can benefit from an early detection and intervention (Kaess et al. 2014).

The aim of this study is to determine the number of borderline spectrum symptoms in this type of patients and to measure the frequency of cannabis use, social adjustment and number of absenteeism days at school in a sample of 10 adolescents seen as inpatients in an adolescent psychiatric unit.

Method: We made 3 evaluations (baseline, at 6 and 12 months) and collected clinical and sociodemographical data's (Life Problems inventory, the ASI, and the GAF). They were all interviewed with the K-SADS- PL, both at baseline and at follow up. We analysed them with descriptive analysis.

Results: All patients were guarded by social services and lived in social residencies. Age was between 12 and 16 years old and the 80 % were men. They all had high levels of borderline spectrum symptoms. 40 % had previous sexual abuse. 30 % of patients developed a schizophrenia spectrum disorder and 20 % developed a bipolar spectrum disorder. Integrated treatment with social services improved their global activity (GAF) from 50 at baseline to 70 % at 1 year Clozapine was the antipsychotic more frequently used (30 %).

Discussion: Adolescents with severe conduct disorders and borderline spectrum symptoms should be treated as high risk mental disorder patients and might require and benefit from a specialized preventive treatment.

Keywords: Borderline symptoms, Adolescent, Prevention treatment.

PM-038

Connection between psychotic symptoms and treatment with levothyroxine: report of a case

Abstract type: Poster Presentation

Thematic area: Clinica Disorders: Schizophrenia and other psychotic disorders

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Connection between psychotic symptoms and treatment with levothyroxine: report of a case

Objectives: We want to emphasize the relationship between the use of Levothyroxine and the emergence of psychotic symptoms, a side effect that can occur with this medication.

Methods: We report the case of a 16 years old woman in treatment with this medication who presented psychotic symptoms.

This is a woman without a psychiatric history of interest; following an only cannabis consumption she presented a major psychotic episode, with delusions, hallucinations and other sensory perception alterations, which required urgent medical attention. Later, after 2 weeks of stability, the patient began treatment with levothyroxine prescribed by Endocrinology to treat an Acquired Hypothyroidism that had manifested itself in the form of fatigue, asthenia, fatigue... Shortly after starting treatment, psychotic symptoms appeared, attributing the symptoms to the onset of a latent psychosis due to intoxication with cannabis (originally not thought of levothyroxine as a possible cause).

Results: We observed during the onset of symptoms, that the intensity of psychotic symptoms varied with changes in dosage of levothyroxine, and even disappeared completely on drug withdrawal.

Conclusion: We should not downplay the possibility that psychotic symptoms may appear with this drug, as it is universally prescribed, even in childhood. This confronts us with the fact that we must raise our attention to the possibility of a latent psychosis, as this possibility has to guide us when prescribing medication with greater caution. Many medications can cause psychosis, and if the patient is a patient vulnerable with this possibility, it is a fact we must bear in mind.

PM-039

Content of OC symptoms and comorbidities in OCD alone versus tic related ocd children and adolescents

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Introduction: DSM V has introduced in the diagnostic criteria for Obsessive-Compulsive Disorder (OCD) the specifier "tic related". This identifies a large group of individuals—with OCD onset in childhood—which have a Tic Disorder (TD) and tend to show different themes of OC symptoms, comorbidity and course.

Our aim was to characterize the content of OC symptoms and psychiatric comorbidities in a large group of children and adolescents showing OCD and/or TD.

Materials and methods: We evaluated subjects presenting to the Department of Child and Adolescent Neuropsychiatry of University of Rome La Sapienza in the last 2 years requiring their first psychiatric consultation for the presence of OC and/or tic symptoms. Clinical diagnosis was assessed by the K-SADS-PL; clinical symptoms were evaluated by the CY-BOCS and the YGTSS; cognitive profiles were assessed by the WISC-III; moreover, self-report [CDI, MASC, STAI-C, PSS-10] and proxy-report questionnaires [CBCL, CPRS-R, P-PSS-10] were administered.

For this report we have excluded subjects with a low cognitive profile (IQ < 70) or an ongoing pharmacological treatment.

Results: We examined 82 subjects (65 males, 17 females), aged between 6.6 and 17.6 years (mean: 12). Twenty-three subjects showed

OCD alone, three OCD + ADHD, thirteen TD + OCD, two OCD + TD + ADHD, twenty-five TD alone and fifteen TD + ADHD. In this group, other comorbid diagnosis were uncommon and scattered, including Separation Anxiety Disorder (12), Oppositional Defiant Disorder (6), Generalized Anxiety Disorder (5), Specific Phobia (5) and Mood Disorder (5).

Patients with OCD alone in comparison with those with OCD+TS showed a broader variety of OC symptoms, even if any specific content of obsessions or compulsions couldn't be identified. Moreover, they obtain significantly higher scores at the CDI questionnaire.

In the whole sample however, patients showing only OC symptoms have significantly lower problems of attention and hyperactivity in comparison with both OCD + TD and TD alone subjects.

Finally, beyond the clinical diagnosis, in 72 % of our sample tic and OC symptoms coexist.

Conclusions: With the caution due to the limited number of subjects and the possible referral bias, our data shows that in children and adolescents there is a large overlapping between tic, OC and ADHD symptoms. Patients with tic related OCD seem to have more externalizing symptoms, whereas the internalizing symptoms prevail in patients with OCD alone. There is not a clear-cut difference between the two subgroups in the content of obsessions and compulsions.

PM-040

Corrected QT changes during antipsychotic treatment of children and adolescents: a systematic review and meta-analysis of clinical trials

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Objective: To evaluate the effect of antipsychotics on the corrected QT (QTc) interval in youth.

Method: We searched PubMed (<http://www.ncbi.nlm.nih.gov/pubmed>) for randomized or open clinical trials of antipsychotics in youth <18 years with QTc data, meta-analyzing the results. Meta-regression analyses evaluated the effect of age, sex, dose, and study duration on QTc. Incidences of study-defined QTc prolongation (>440–470 ms), QTc >500 ms, and QTc change >60 ms were also evaluated.

Results: A total of 55 studies were meta-analyzed, evaluating 108 treatment arms covering 9 antipsychotics and including 5423 patients with QTc data (mean age = 12.8 ± 3.6 years, female = 32.1 %). Treatments included aripiprazole: studies = 14; n = 814; haloperidol: studies = 1; n = 15; molindone: studies = 3; n = 125; olanzapine: studies = 5; n = 212; paliperidone: studies = 3; n = 177; pimozide: studies = 1; n = 25; quetiapine: studies = 5; n = 336; risperidone: studies = 23; n = 2234; ziprasidone: studies = 10, n = 523; and placebo: studies = 19, n = 962. Within group, from baseline to endpoint, aripiprazole significantly decreased the QTc interval (−1.44 ms, CI = −2.63 to −0.26, p = 0.017), whereas risperidone (+1.68, CI = +0.67 to +2.70, p = 0.001) and especially ziprasidone (+8.74, CI = +5.19 to +12.30, p < 0.001) significantly increased QTc. Compared to pooled placebo arms, aripiprazole decreased QTc (p = 0.007), whereas ziprasidone increased QTc (p < 0.001). Compared to placebo, none of the investigated antipsychotics

caused a significant increase in the incidence of the 3 studied QTc prolongation measures, but there was significant reporting bias.

Conclusion: Based on these data, the risk of pathological QTc prolongation seems low during treatment with the 9 studied antipsychotics in otherwise healthy youth. Nevertheless, because individual risk factors interact with medication-related QTc effects, both medication and patient factors need to be considered when choosing antipsychotic treatment.

PM-041

Defining social reciprocity deficits in internet addiction: evaluation of problematic internet user (PIU) adolescents in an University Outpatient Clinic

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Introduction: Internet provides an immediate access to explore information and serves an easy way for communication. However, a loss of control over Internet use might lead to a negative impact on adolescents. This phenomenon is suggested to be one type of behavioral addiction, named as Internet addiction or problematic Internet use (PIU). Many studies have shown that PIU may have negative effects on the psychosocial aspects of adolescent mental health. On the contrary, studies investigating the relation between the internet addiction and social reciprocity in adolescents are absent. Our study is planned to evaluate the social reciprocity measures of PIU adolescents in the context of the accompanying psychopathology.

Method: In this cross-sectional case-control study; parents completed a detailed form for socio demographic variables. Psychiatric diagnoses of randomly selected children from the Outpatient Child Psychiatry Clinic were established by using the Kiddie Schedule for Affective Disorders and Schizophrenia Present and Lifetime Version. Strength and Difficulties Questionnaire, Social Reciprocity Scale, Pier – Harris Self Concept Scale, Internet Addiction Scale (IAS), and Negative Life Events List were filled out by the children. Cases with IAS scores over 40 were defined as PIU.

Results: In this study, 45 PIU cases and 30 control cases between the ages of 12–17 were evaluated. The average age of PIU was 14.4 ± 0.86 and the average age of control group was 13.73 ± 1.33. Boys were significantly more described as PIU (p < 0.05). Cigarette smoking and energy drink consumption (p < 0.05), sleep problems (p < 0.05), the presence of negative life events (p < 0.001), poor social skills and low self-perception levels (p < 0.001 and p < 0.05 respectively) were significantly present in PIU group when compared to controls. Furthermore we found that depressive disorder (37.8 %), anxiety disorder (15.6 %) and Attention Deficit Hyperactivity Disorder (32.2 %) were more frequently seen in PIU group. Logistic regression analyses revealed out that poor social response skills, exposure to internet in younger ages, unlimited internet connection at home, energy drink consumption, and having a psychiatric diagnosis were significantly associated with PIU after controlling for demographic characteristics.

Conclusion: We examined the relationships between socio demographic variables, social reciprocity, self-perception, and accompanying psychopathology in PIU adolescents. The situational factors such as easy access to unlimited Internet connection in earlier ages at home must be taken cautiously into consideration. The neurobiological tendencies including psychiatric comorbidity, sleep disorders and overconsumption of energy drink may carry higher preponderance of Internet addiction in adolescents.

PM-042**Delayed sleep phase disorder in adolescents: a review**

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Introduction: According to studies, 50 % of childhood and adolescence have sleep problems, although only 4 % will have a diagnosis of sleep disorder. In adolescence, the most common disorder is the syndrome of delayed sleep phase disorder, with a prevalence of around 15 %. The importance of this disorder goes beyond the clinic of insomnia; these patients may also have consequences in their daily work, behavioral disturbances and psychiatric comorbidities.

Objectives: Review of the literature on the pathogenesis, clinical features and consequences of the delayed sleep phase disorder in adolescents.

Results: There are two main causes for the start of delayed sleep phase disorder. On one hand, the circadian rhythm lengthens in adolescence compared to childhood. On the other hand, the changes in activities and social life of the adolescents. Both factors determine the delay time to sleep and, consequently, the awakening. However, there is not a decrease in sleep quality and the number of hours is only conditioned by the social needs in daily work (in fact, when a strict schedule is not mandatory, patients often do not perceive any problem). The decrease of sleep hours causes irritability, low productivity in job or academic issues and psychiatric pathologies such as mood disorders. In many cases, the diagnosis goes unnoticed—the problems are often attributed to the lack of responsibility of the person or laziness—or misdiagnosed—starting sometimes psychopharmacological treatments that perpetuate the problem. The treatment is based in sleep hygiene education, bright light therapy and melatonin and is usually effective in most cases.

Conclusions: Concerns about sleep disorders, especially in children and adolescents, are increasing. It seems essential to evaluate this and other possible sleep disorders, not only to provide specific treatments, but also because a correct approach to these disorders will improve other psychiatric or physical problems and will prevent complications on other areas.

1. Carter K (2014) Common Sleep Disorders in Children. *Am Fam Physician*. 1 89(5):368–377.
2. Gradisar M (2013) Delayed sleep phase disorder in youth. *Curr Opin Psychiatry* 26(6):580–585
3. Robillard R (2013) Delayed sleep phase in young people with unipolar or bipolar affective disorders. *J Affective Disord* 145:260–263

PM-043**Depression mediates the relationship between stressful life events and non-suicidal self-injury (NSSI) in an adolescent outpatient sample**

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Background: NSSI has been associated to depression in adolescents. Likewise experiencing stressful life events has been associated to

depression in adolescents. However, the relationship between NSSI and stressful life events has rarely been examined. Our aim was to examine the influence of stressful life events on NSSI in a clinical sample of adolescents.

Methods: 11 to 17 year-old subjects were recruited from the Child and Adolescent Mental Health Outpatient Services. They completed the Self-Injurious Thoughts and Behaviors Interview (Garcia-Nieto, Blasco-Fontecilla, Paz Yepes & Baca-Garcia, 2013), the Life Events Stress Scale (Oliva, Jiménez, Parra & Sánchez-Queija, 2008), and the Children's Depression Inventory (Del Barrio, Roa, Olmedo & Colodron, 2002). Sociodemographic data, developmental features, medical and psychiatric history and treatment histories were also evaluated. A study of mediation applying a general linear model analysis was conducted in order to examine the mediation of depression on the relationship between total number of stressful life events and NSSI.

Results: 265 adolescents (64.5 % male; mean age 14.21 years, Sd = 1.95) took part in this investigation. 22.3 % of them reported NSSI. Although the number of stressful life events was significantly associated with the presence of NSSI ($t = -3.144$, $p = 0.002$) analyses supported that the relationship between stressful life events and NSSI was partially mediated by depression (Depression: $F = 11.39$, $p = 0.001$; Total stressful life events: $F = 1.91$, $p = 0.168$).

Conclusions: experiencing stressful life events may put adolescents at a greater risk of displaying NSSI behaviors. However, among adolescents evaluated at Mental Health Centers this relationship appears to be mediated by depressive symptomatology. Longitudinal studies are warranted.

Keywords: NSSI, Stressful Life Events, Depression, Adolescence, Clinical Sample.

References

Del Barrio V, Roa M, Olmedo M, Colodron F (2002) Primera adaptación del CDI a la población española. *Acción Psicológica* 3:263–272.

Garcia-Nieto R, Blasco-Fontecilla H, Paz Yepes M, Baca-Garcia E (2013) Translation and validation of the “Self-injurious thoughts and behaviors interview” in a Spanish population with suicidal behaviour. *Revista de Psiquiatría y Salud Mental* 6(3):101–108.

Oliva A, Jiménez JM, Parra Á, Sánchez-Queija I (2008) Acontecimientos vitales estresantes, resiliencia y ajuste adolescente. *Revista de Psicopatología y Psicología Clínica* 13(1):53–56.

PM-044**Developmental regression in autism**

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Introduction: Autism symptoms can be observed from the first months of life or after an initial period of typical development followed by a regression with loss of some developmental milestones and occurrence of core autistic picture. This last pattern is referred to as regressive autism and is still associated with some controversial debates regarding its own validity and on whether it is representing a particular subtype of autism.

The objectives of this study were to describe regression in autism and to compare the clinical pictures in children with regressive and non regressive autism.

Methodology: A descriptive cross-sectional study was conducted on 100 consecutive children diagnosed with autism from the child and adolescent psychiatry outpatient clinic in University Hospital F. Bourguiba, Monastir Tunisia, with an age ranging from 3 to 9 years.

Children diagnosed with a known genetic syndrome or a documented neurosensory impairment were excluded.

Investigation was conducted with the Early Development Questionnaire EDQ (S. Ozonoff et al. 2005), the Autism Diagnostic Interview-Revised (ADI-R) and the Childhood Autism Rating Scale (CARS).

Results: Regression was found in 42 % of cases. Gender and severity of autism were not associated with regression. Mean age of regression was 20 months with extremes ranging from 5 to 33 months. Socialization and communication were the major domains of regression. Some factors occurred prior to regression, either somatic (infection, unexplained fever, vaccination), or psychological (birth of a brother/sister, separation from care-giver)...

The clinical picture of autism in regressive and non regressive groups was not very different, neither was the short-term and mid-term outcome.

Conclusions: Regression is occurring at a higher rate than usually reported but recall bias and excessive focusing on communication are limiting the conclusions regarding clinical specificities and possible associated factors.

PM-045

Different aspects of neurodevelopmental disorders: recent studies from Turkey

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1. Is there a relationship between eating behavior and autistic traits?
2. The relationship between metabolic disorders and attention-deficit/hyperactivity disorder (ADHD): focus on vitamins.
3. Ways of integrating data from parents and teachers to estimate prevalence of ADHD in children and adolescents.
4. Cognitive profiles of children with Down syndrome.

PM-046

Disharmonic personality disorder in adolescents

Abstract type: Poster Presentation

Thematic area: Clinica Disorders: Other

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Abstract

Background: The human personality represents simultaneously both a concept and a multidimensional structure that integrates biologically, psychologically and socially conditioned components. Thus, a disharmonic personality implies the development of abnormal,

maladaptive traits which interfere with day to day life. Personality disorders with onset during adolescence are characterized by a symptomatology that becomes manifest after the ages of 10–12 years.

Objective: In this analysis we try to identify the diagnostic frequency of personality disorders in adolescents, the differences between behaviours considered to be specific to this particular age group.

Methods: Data was collected from the Child and Adolescent Psychiatry Department of „Prof. Dr. Al. Obregia” Clinical Psychiatric Hospital in Bucharest, during the months of January to November 2014. All patients in the lot were above age 14.

Results: A diagnosis of personality disorder is frequently given after age 16, a few years after the onset of the first symptoms which are usually considered as behavioural disorders. The most frequent diagnosed disorders are borderline disorder and obsessive-compulsive disorder.

Conclusions: The results underline the importance of a rapid diagnosis of personality disorders. Even if less than 5 symptoms are present, these can imply severe impairment of functionality and significant distress leading to destructive behaviours such as suicidal attempts, self mutilation, substance abuse, etc. Through thorough evaluation and early consideration of a diagnosis of personality disorder, more patients can receive treatment tailored to their symptomatology and, as such, avoid complications in later stages of development.

Keywords: Borderline, Personality disorder.

PM-047

Does reflective function mediate the response to trauma?

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Background: What factors contribute to human reactions after an important life event is one of the most important questions regarding trauma. It is still unknown whether Reflective Function (RF) contributes to the response of impairment, resilience, or even Post-Traumatic Growth (PTG) after trauma. RF is the ability to recognise the mental states (feelings, wishes, needs, beliefs) that underpin own and others' behaviours. RF is related to the capacity to contact with, hold, and understand emotions, and therefore to “metabolize” suffering.

Objective: The aim of the present study is to analyze to what extent RF mediates the response of impairment, psychopathology, resilience, and PTG associated to biographic trauma.

Method: A sample of 185 adolescents aged 12–18 years old and their parents were assessed on measures of trauma, impairment, RF (Brief RF Scale 4; BRFS-4), deficit in RF (Mentalization Questionnaire; MZQ), Resilience (Connor-Davidson Resilience Scale 10, CD-RISC 10), PTG (Posttraumatic Growth Inventory; PTGI), Personality (Big Five Inventory), Emotional Intelligence (Trait Meta-Mood Scale; TMMS-24), Attachment (Relationship Style Questionnaire; RSQ), Self-Transcendence (Aspiration Index), and Psychopathology (CBCL, BDI, MASC, Personality Diagnostic Questionnaire-4, and Somatization Scale).

Results: The intensity and duration of suffering, as well as the consequences and the impairment after trauma are associated to problems in RF. A deficit in RF also mediates the relation between biographic

trauma and depression, anxiety, borderline personality symptoms, and somatic complaints (β MZQ ranging from 0.40 to 0.43). Interestingly, resilience after biographic trauma is more strongly associated to the caregiver's RF (β BRFS-4 ranging from 0.35 to 0.40) than to problems in the participant RF (β MZQ from -0.21 to -0.34). By contrast, a deficit in the caregiver RF mediates PTG after biographic trauma (β MZQ-PA from 0.21 to 0.36).

Conclusion: A deficit in the participants' RF mediates impairment and psychopathology after trauma. However, a resilience after trauma is more influenced by the principal caregiver's RF than by the participant's RF. Interestingly, PTG is positively associated to a deficit in the caregivers' RF, thus suggesting that less caregivers' capacity to understand and hold the children's suffering may promote CPT. Overall, this study supports that both adolescents' and parents' capacity to "metabolize" suffering is important to deal with trauma, and highlights the importance of focusing intervention and prevention programs in the improvement of RF (377 words)

Keywords: Reflective function, Trauma, Impairment, Psychopathology, Resilience, Post-traumatic growth, Adolescence.

PM-048

Does the age of beginning primary school affect attention deficit hyperactivity disorder symptoms?

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Introduction: Attention Deficit Hyperactivity disorder (ADHD), is one of the most frequent psychiatric disorders in childhood. It has been reported that among children at school age, the prevalence of ADHD varies between %2–20 and prevalence of comorbidity is high. An understanding of the epidemiological aspects of ADHD/HD may provide insight into its distribution and etiology as well as information for planning the allocation of funds for mental health services.

Objectives: We aimed to identify the rates of Attention Deficit Hyperactivity Disorder (ADHD) symptoms, and the interrelation of ADHD with sociodemographic variables especially age and degree of class in a sample of Turkish students

Methods: The study population was composed of 4356 school age children from 1st and 2nd grades in all primary schools for state in Kadikoy-Istanbul. Sociodemographic data were collected from teachers by sociodemographic data form, and ADHD symptoms were evaluated by Conners' Teacher Rating Scale and SNAP ADHD form.

Results: According to results 169 (% 3.7) children were found to be in the range of ADHD risk according to our questionnaires. The primary school experience, mother education level and age affect the severity of ADHD symptoms.

Conclusion: This study was undertaken in order to provide a current estimate of rates of ADHD and indicating risk factors among primary school children and to compare rates of disorder across studies. According to the results of our study we concluded the sociodemographic features (sex, age, education of parents) affects the symptom severity of ADHD.

PM-049

Does the brief observation of social communication change (BOSCC) help moving forward in measuring change in early autism intervention studies?

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The choice of outcome measures in autism research is highly varied and there is little consensus about what measures to use to evaluate change over time. This enormous variation in outcome measures has kept autism research from effective comparisons between intervention studies and compromises conclusions regarding the most effective intervention types for children with Autism Spectrum Disorders (ASD). Given the differences in developmental patterns between children with ASD, a common outcome measure or a set of measures is highly needed to detect change over time and to identify who will benefit most from which interventions.

The current study aims to investigate the usefulness of an in-development change-measure of key autistic behaviours, the Brief Observation of Social Communication Change (BOSCC; Lord et al., 2014), as a promising candidate outcome measure in early treatment studies. The sample included 67 toddlers (aged 12–42 months) diagnosed with ASD and their parents who participated in an early intervention study (RCT), focusing on enhancing joint attention and language skills (Oosterling et al. 2010). Parent-child dyads were videotaped at pre and post intervention. In the current study these clips were recoded by blind observers using the BOSCC.

We are still working on analyses, but results will be related to commonly used outcome measures in autism research, namely the Autism Diagnostic Observation Schedule (ADOS) and the MacArthur Communicative Development Inventory (CDI). The clinical relevance of the BOSCC will also be investigated by relating the change scores to scores on the Clinical Global Impression—Improvement scale (CGI-I). In addition, both the inter- and intrarater reliability of the coders will be explored. The poster will present results and their relevance for research and practice will be discussed.

Keywords: Autism Spectrum Disorder, Outcome measures, Early intervention.

PM-50

DSM-5 classification of personality disorders versus operationalized psychodynamic diagnosis in children: a clinical comparison

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Background: The diagnosis of mental and disorders is currently dominated by descriptive diagnostic systems. For the first time, in its fifth edition, the DSM proposes a new classification system for personality disorders (PD), which incorporates evidence-based concepts and constructs, and with potential for greater clinical (and research) utility while further facilitating the assessment and comprehension of pediatric patients. Coupled with this, in the last decade, psycho-

analytically inspired assessment tools were developed in which psychic structure and mental functioning have become a diagnostic core concept. The operationalized psychodynamic diagnosis in children and adolescents-2 (OPD-KJ-2) is one such attempt at the operationalization of psychodynamic concepts, delivering clinical practice-oriented insights while showing good psychometric properties.

It is our aim to describe such assessment strategies and provide a discussion of their clinical and scientific value.

Methods: With the aid of a clinical case vignette we took the recommended standard approach to the assessment of personality pathology according to the new DSM-5 proposal and using the Personality Inventory for DSM-5 (PID-5)—Child version and examined the “structure” axis following the OPD-KJ-2 manual. A clinical comparison between both approaches is herewith drawn. A computerized selective review of the most recent evidence was conducted.

Results: The use of multidimensional and research-guided approaches provides interesting and clinically relevant information, while shedding some light on features like identity integration and maladaptive personality traits and capturing better the nuances of development. As expected, the level of psychic structure integration in the OPD-KJ-2 shares many common factors with the level of personality functioning scale of the DSM-5 proposed model, in particular in self-concept and interpersonal profiles.

Conclusion: Although there is a lively controversy regarding the concept of PD in children, this kind of approaches broadens our understanding of patient psychopathology and opens up new realms for planning and guiding psychotherapeutic interventions without the pressure of a categorical diagnosis. Whilst the proposed changes in the new model of PD disrupt progress in the field of both PD research and clinical practice, it reflects the best evidence to date in personality pathology. It is our opinion that future studies should encompass an integrative and multidimensional view in order to advance the field of psychoanalytically informed neuroscience in child psychiatry.

Keywords: DSM-5; Personality disorder; Operationalized Psychodynamic diagnosis; Child psychiatry.

[Affiliations were removed (word limit exceeded)]

PM-051

Efficacy of group educational training on knowledge, stress, anxiety and depression in parents of children with autistic disorder

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Introduction: There is a paucity of data regarding the efficacy of group education for parents of children with autistic spectrum disorder. The aim of this study was to investigate the effectiveness of a parental group educational program to increase the parents’ knowledge about the autism, its correlates and therapeutic interventions, and to decrease their depression, anxiety and stress.

Materials and methods: Among referrals to the child psychiatry clinic at Roozbeh hospital in Tehran the capital of Iran, twelve parents with a child with autistic disorder participated in a group education program consisting of five 2-h weekly sessions. Each session consisted of a specific agenda including: autism and its clinical characteristics, the ways to improve communication with children, the impact of playing on children’s language improvement, and the appropriate strategies to manage their behavior. The materials were practiced using brainstorming, role-playing, sides and handouts. The speech-language-hearing history profile of each

child was completed. Before initiating and after completing the program, the participants were evaluated via following assessment tools: the depression-anxiety-stress scale, participant satisfaction scale, and a tailored questionnaire for assessing parents’ knowledge level.

Results: Study data showed a significant increase in parents’ knowledge level ($P < 0.001$). The participants were satisfied with the quality of the program. There was no improvement in any measures of the depression, anxiety, and stress.

Conclusion: Group educational training could be effective in increasing the parents’ knowledge on autism spectrum disorder and its characteristics. The findings suggest specific related interventions to improve parents’ emotional problems.

Keywords: Autism, Group education, Parent training.

PM-052

Emotion recognition and perspective taking in incarcerated male adolescent offenders

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Objectives: Emotion recognition and perspective taking are key factors in social interactions as they provide a basis for understanding, anticipating and inferring the mental states behind the actions of other people. Impairments in these abilities are associated with aggressive and antisocial behavior.

The aim of the present study is to investigate emotion recognition and perspective taking abilities in a sample of incarcerated male adolescents. In contrast with previous studies, we measured the recognition both positive and negative emotions concurrently to a visual perspective-taking task. We hypothesized that adolescent offenders, in comparison with the control group, would show reduced emotion recognition and perspective taking abilities.

Methods: Thirty-eight male adolescents participated in the study, 18 incarcerated adolescents from a youth educational detention center (M age = 16.44, SD = 1.04) and 20 control community adolescents (M age = 16.20, SD = 1.34). Emotion recognition abilities were measured using the Geneva Emotional Recognition Test, a dynamic and multimodal task that requires the participants to watch short videos, in which trained actors express 14 emotions. Perspective taking was examined using a computerized task, the “director task”, where participants had to follow the directions of another person, the director, whilst taking into consideration his perspective.

Results: For the emotion recognition task, the MANOVA showed an effect of group on the ability of emotion recognition, $F(14, 23) = 2.14$, $p = 0.05$. Separate univariate ANOVAs revealed significant group effect on the recognition of specific emotions: anxiety ($F(1, 36) = 7.08$, $p < 0.05$), interest ($F(1, 36) = 8.77$, $p < 0.05$), and pride ($F(1, 36) = 0.05$). Moreover, Mann Whitney U test showed that the adolescent offenders group had significantly lower performances in perspective taking ($U = 247$, $p = 0.05$).

Discussion: In this study, adolescent offenders showed significantly reduced abilities of emotion recognition, specifically for the expression of interest, anxiety and pride and reduced abilities of perspective taking. The inability to recognize anxiety confirms the results of previous studies, which showed deficits of young offenders in recognizing negative emotions, especially the emotions related to fear. The impairments in recognizing interest and pride, which are emotions implicated in knowledge acquisition and consolidation through

social interactions, might be due to a lack of adequate social contacts during the development. Future studies are necessary in order to understand the developmental trajectories of these impairments, as well as their role in the development of aggressive and antisocial disorders.

PM-053

Emotional dysregulation in adolescents, a common potential denominator between eating disorders and bipolar spectrum

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Introduction: Emotional dysregulation is a characteristic present in many child & adolescent mental pathologies. It can be found in Eating disorders (ED), and in the bipolar spectrum too. Highlighting similarities between a softer bipolar spectrum in its sub-threshold forms and eating disorders syndromes and sub-syndromes in adolescents.

Objective: Evaluate the emotional dysregulation (measured by the HCL-32), and eating habits (measured through the BEDS), in a population with ED.

Materials and methods: This is a transversal, observational study in a group of 40 patients between 12 and 19 years of age, all of whom were diagnosed with ED before they turned 18 and receive inpatient treatment. The group was divided into two subgroups: Group-I: Anorexia Nervosa-AN ($n = 17$), and Group-II: Bulimia Nervosa-BN ($n = 23$). They were evaluated with two scales: Hypomanic Checklist (HCL-32) and Barcelona-Bipolar-Eating-Disorder-Scale (BEDS); with different clinical and sociodemographic characteristics. **Results:** Group I-AN showed higher scores in HCL-32, which was not correlated with the BEDS total score. Group-II presented high scores in HCL-32, showing a positive correlation with the BEDS total score ($r = 0.518$; $p = 0.011$), mainly in the subscale symptoms of hypomania associated with a lack of inhibition, self-control and attentional capacity ($r = 0.461$; $p = 0.027$).

Conclusions: Emotional dysregulation is a factor to be considered in the diagnosis and clinical management of patients with ED, and may imply in other comorbid conditions. Furthermore, Bulimia Nervosa, especially in cases with emotional dysregulation could be related to hypomania or a bipolar spectrum.

BEDS Scale may be related to emotional dysregulation in patients diagnosed with Bulimia Nervosa and high score in the scale of hypomania HCL-32, not so for the Anorexia Nervosa.

PM-054

Emotional face perception: event-related potentials (ERPs) contribution to differentiate schizophrenia and autism spectrum disorders in adolescents

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Early onset schizophrenia (EOS) and autism spectrum disorders (ASD) are now recognized as distinct disorders, with distinct features.

However similarities between these disorders remain, in particular in the area of social cognition and emotion processing. It remains unclear whether these similarities come from shared or disorder-specific mechanisms and pathways. This multicenter study carried out in the three main Child and Adolescent psychiatry departments of the district compared three groups of adolescents matched for age and verbal IQ. Eighteen adolescents with EOS (mean age = 15 ± 1.6), 19 adolescents with ASD (mean age = 15 ± 2.1) and 20 typically developing (TD) adolescents (mean age = 14 ± 1.7) were included. All groups completed an implicit emotional face perception task: subjects were instructed to observe the images of emotional faces (neutral, happiness, sadness, fear) on a computer screen while visual ERPs (focusing on the P100 and N170 electrophysiological components) were recorded. Results revealed that both EOS and ASD adolescents showed impairments in emotion processing, but distinct patterns emerged in each disorder. The EOS group showed altered early visual processing of emotional faces (reduced P100 peak amplitude), which was related to clinical symptoms of schizophrenia. In the ASD group, differences occurred predominantly within the 'face sensitive' N170 component, suggesting atypical configural face processing and altered social brain functioning. Findings in adolescents with EOS suggest the involvement of developmental processes with impairments in emotional processing in the early stages of the disorder. The discrimination of specific impairments supports the need for distinct early intervention approaches to EOS and ASD.

Keywords: Emotion; Event-related Potential; Early Onset Schizophrenia; Autism.

PM-055

Event-related potentials in drug Naïve pediatric patients with obsessive compulsive disorder

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Keywords: Obsessive compulsive disorder, Event-related potentials, Mismatch negativity, P300.

Obsessive compulsive disorder (OCD) is one of the most common mental health disorder characterized by obsessions and/or compulsive behaviors, which may involve a specific disorder in cognition and/or information processing. OCD is a serious psychological disorder with occurs in approximately 2 % of child and adolescents. Event-related potentials (ERP), which are easily measured and non-invasive, are commonly used as physiological measures of cognitive function to explore the underlying neurophysiological mechanisms and characteristics of the cognitive dysfunctions of several psychiatric disorders. In present study, thirteen drug naïve pediatric patients with OCD were compared with 10 healthy control participants who were age- and sex-matched to perform the ERP. Based on the guidelines for evoked potential measurement, mismatch negativity (MMN) and P300 were obtained by auditory odd-ball tasks. We found that P300 amplitude components in Fz, Cz, Pz, C3 and C4 were significantly smaller in the OCD group compared with the control group. There were no differences in P300 latency, MMN amplitude and MMN latency. Moreover, we found that correlations between P300 amplitude components in Cz, Pz and C3 and Children's Yale-Brown Obsessive-Compulsive Scale (CY-BOCS) scores. The present study is the first to show smaller P300 and an association between P300 abnormalities and CY-BOCS scores in drug naïve pediatric patients with OCD.

Thus, our research indicates that drug naïve pediatric OCD patients might have cortical hypoactivity. Moreover, the lower cortical activity is, the more severe OCD symptom is. Therefore, P300 amplitude components are sensitive tools for measuring the biological assessment of OCD severity.

PM-056

Executive function in autism spectrum disorder without intellectual disability: case control study

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There are contradictory studies of children and adolescents with Autism Spectrum Disorder without intellectual disability (ASD) on the performance in executive function tasks. Our hypothesis was that children and adolescent with ASD would obtain an impaired cognitive profile, show lower significant scores in attention, working-memory, mental-flexibility, inhibitory-control and problem-solving tasks than a healthy controls (HC).

Methods: In a sample of ASD without intellectual disability and HC we applied a neuropsychological battery composed by the following test: Wisconsin Card Sorting Test (WCST), Stroop Color Word Test (STROOP), Continuous Performance Test-II (CPT-II), Trail Making Test (TMT), Digit and Letter-Number sequencing using WAIS-III. Five domains of cognitive functioning were constructed (attention, working-memory, mental-flexibility, inhibitory-control and problem-solving) by selected individual measures from aforesaid tests. We used z-score transformations of raw scores of each subtest considered and then comprised as follows: attention (WAIS-III Digits Forward, Number of Correct Responses CPT and Mean Hit Reaction Time CPT); working-memory (Digits Backward and Number-Letter Sequencing by WAIS-III); mental-flexibility (Number of Perseverative Errors, Number of Errors, Number of Perseverative Responses by WCST and Derived Score from TMT-B); inhibitory-control (commissions CPT and Stroop Interference Score); problem-solving (number of Categories Completed, Conceptual Level Responses and Conceptual Level Responses by WCST). Not all variables were normally distributed, T-Student test and Man Whitney U test, for normal and no normal distribution of variables respectively, were used for the analyses. Effects sizes were calculated. All statistical tests were one-tailed, and a p value of <0.05 was considered statistically significant.

Results: 28 ASD patients met the inclusion criteria (24 Asperger syndrome and 4 high functioning autism according DSM-IV); mean age: 13.14 ± 2.43 and 92.9 % (n = 26) was male. 40 HC were included (mean age: 12.55 ± 2.68 years old; 95 % (n = 38) was male). Comparing z-score of both groups in the five cognitive domains assessed, revealed significant differences, with better performance in favour of HC: Attention: ASD (mean = -0.77 ± 0.92) versus HC (mean = -0.003 ± 0.68); T66 = 3.93; $p < 0.0001$ ($r^2:0.19$). Working-memory: ASD (mean = -0.60 ± 0.60) versus HC (mean = 0.002 ± 0.87); T66 = 3.15; $p = 0.002$ ($r^2:0.13$). Mental-flexibility: ASD (mean = -0.6 ± 1.05) versus HC (mean = 0.001 ± 0.86); T66 = 2.81; $p = 0.004$ ($r^2: 0.11$). Inhibitory-Control: ASD (mean = -0.39 ± 0.72) versus HC (mean = -0.0002 ± 0.59); T66 = 2.44; $p = 0.009$ ($r^2:0.08$). Problem-solving: ASD (mean = -0.59 ± 1.06) versus HC (mean = -0.0003 ± 0.83); U = 366.50; $p = 0.008$ (Z/\sqrt{n} : 0.29).

Conclusion: Children and adolescents with ASD without intellectual disability show longer response latency, difficulties to retain, transform and manipulate mentally information, rigidity and attention problems problems in the inhibition of automatic responses and performance in solving problems.

PM-057

Experience with LDX in Spain

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Introduction: Since April 2014 a new drug is available in Spain, as part of a Program of Integral Treatment for children with ADDH from 6 years on, previously treated with MFD without satisfactory response. LDX is a prodrug, which is absorbed in the digestive tract, remaining inactive until it reaches the bloodstream, where it is hydrolyzed inside the erythrocyte. It is administered orally and the duration of effect is approximately 13 h.

Side effects are similar to other stimulants, the most frequently found are decreased appetite, insomnia, headaches and abdominal pain.

Objective/target: To evaluate LDX treatment results in children and adolescents with ADHD and insufficient clinical response to other therapeutic options.

Materials and methods: Systematic Review of medical records from 09/01/14 to 30/11/14 of patient in 7–17 age range, both male and female, diagnosed with ADHD, treated in the Department of Psychiatry, Sant Joan de Deu Hospital, Barcelona.

Results: We found 20 patients treated with LDX (7–16 years old, 3 women and 17 men) after trying other pharmacological options which had failed mainly due to lack of response, symptoms of depersonalization and insufficient duration of therapeutic effect; positive response was found in 19 of 20 case.

Conclusions: LDX can be used in cases of inadequate clinical response or adverse effects after trying other therapeutic options in patients with ADHD from 6 years on, finding positive response to treatment and few adverse effects.

Bibliography: Monografía de la Lisdexanfetamina dimesilato. C. Soutullo et al. Editorial Comunicación y ediciones Sanit. 2014

PM-058

Facebooking suicide: evaluation of pro-suicide websites in most used Spanish social networks by adolescents

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Introduction and objectives: 96 % of Spanish youth (15–29 years old) use daily Internet. In addition, 83 % use Social Networks (62 % of activity on Social Networks in Spain is on Facebook), making Internet the second most popular media after phone. Internet could be a good way to spread information through websites, providing material and means to achieve the self-harm purpose. Our objective is to measure the number of sources dedicated to suicide in this media.

Methods: We use “cómo suicidarse” (which means: “how can I kill myself”) and “suicidio” (which means: suicide) as search terms in Google search engine and the most used Social Networks in Spain (Facebook, YouTube, Twitter, Tuenti, Instagram, Myspace and Blogspot).

Results: Google: 41.700 results. In the first screen all the websites are about easy or painless ways to commit suicide.

Facebook: 117 results. 35 sites showing advocacy of suicide and 6 events of people announcing the day that they were thinking on committing suicide.

YouTube: about 759.000 results. On the three first screens, we can only see videos of people saying goodbye before killing themselves and others showing easy ways of committing suicide.

Twitter: 2.760 results. Most of them kidding and playing down about suicide.

Tuenti: 101 results. 4 sites of bullying, where adolescents cheer up other adolescents to kill themselves and 21 sites about autolytic thinking and self-harming as a way of life. The rest of websites is making jokes around the idea.

Instagram: 33.288 results.

Myspace: 19.400 results.

Blogspot: 4.150 results.

Conclusion:

It is very easy to find information about methods of committing suicide on Internet (specially in Social Networks), also uncommon ones as using gases, chemical products, drugs and other more selective ones are described. Considering that Internet increasingly takes more importance in our lives, its influence in suicide methods must be considered and also the impact in the prevalence of deaths due to this cause, especially among young users because they spend a lot of time surfing on Internet. Content generated on Internet should be taken into account while planning suicide prevention programmes.

PM-059

Factores de riesgo y protección para ideación suicida en adolescentes universitarios en Colombia

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El suicidio es una de las tres primeras causas de mortalidad entre adolescentes y adultos jóvenes en el mundo (OMS, 2014). En Colombia, el departamento de Nariño tiene una de las tasas de suicidio más altas del país (Medicina Legal, 2013). Estudios epidemiológicos han mostrado que la ideación suicida, la cual es un antecedente del suicidio, es más prevalente en las mujeres que en los hombres (OMS, 2014). Investigaciones también han identificado los síntomas depresivos (Amézquita, et al., 2008) y la baja autoestima (Rossello, 2004) como variables significativamente asociadas con la ideación suicida. Sin embargo, estudios en Colombia no han examinado la religiosidad, el familismo y el apoyo social como factores de protección en contra de la ideación suicida. En este estudio se probó la hipótesis que cada uno de estos tres factores protegerían en contra de la ideación suicida entre adolescentes universitarios en Nariño, Colombia.

Análisis fueron conducidos en una muestra de 169 participantes (64.5 % mujeres; 16–19 años de edad; $M = 17.97$ años; $DE = 0.935$). El 31.4 % de los participantes reportaron pensamientos suicidas durante el último año. Aunque las mujeres ($M = 1.5$, $DE = 0.996$) reportaron más pensamientos suicidas que los hombres ($M = 1.32$, $DE = 0.685$) la diferencia no fue estadísticamente significativa ($F = 6.98$, $p = 0.064$). Se construyó un modelo de regresión múltiple en dos pasos para determinar la contribución de la religiosidad, el

familismo y el apoyo social a los pensamientos suicidas por encima de la contribución del género, los síntomas depresivos y la autoestima. Los resultados mostraron que los síntomas depresivos ($\beta = 0.241$, $p = 0.02$) y la baja autoestima ($\beta = -0.285$, $p = 0.000$) estuvieron significativamente asociados con los pensamientos suicidas incluso después de entrar las variables de religiosidad, familismo y apoyo social. De éstas últimas tres variables sólo el apoyo social ($\beta = -0.183$, $p = 0.027$) fue significativamente asociado con los pensamientos suicidas, lo que apoyó la hipótesis del estudio parcialmente.

Los síntomas depresivos y la baja autoestima fueron factores de riesgo mientras que la alta autoestima y el apoyo social fueron factores de protección en contra de la ideación suicida. Programas de bienestar universitario deberían implementar estrategias para identificar estudiantes con síntomas depresivos y baja autoestima y desarrollar intervenciones que les ayuden a los estudiantes a mantener una autoestima positiva e incrementar sus redes de apoyo social como estrategia para reducir la ideación suicida.

Palabras Claves: ideación suicida, adolescentes, religiosidad, familismo, apoyo social

PM-060

Factors influencing quality indicators of outpatients from child and adolescent mental health services (CAMHS)

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Background: The knowledge about the factors influencing the quality indicators of child and adolescent psychiatric treatment is still underdeveloped. In this context, parent and youth perception of psychiatric care can be considered as important and non-redundant information allowing the assessment of the quality of child and adolescent mental health services (CAMHS). Therefore, the role of various factors in predicting quality indicators (i.e. therapeutic alliance, satisfaction and perceived treatment efficacy) was examined.

Method: 1433 participants (parents, $N = 770$, and youth older than 10, $N = 663$) attending or having attended (drop out) as outpatients of CAMHS of the canton de Vaud participated in this study. Outcome measures are satisfaction (CSQ-8), therapeutic alliance (HAQ) and perceived treatment efficacy. Factors predicting these quality indicators are socio-demographic variables (patient age, patient gender, parents' socioeconomic status (SES)), general factors (drop out, number of people addressing the patient, number of reasons for addressing the patient), first appointment (waiting time for first appointment, agreement for first appointment, reassurance during first appointment), therapeutic setting (frequency of consultation, changing therapists, time to formulate questions), general setting of CAMHS (phone access, kindness of the secretary, agreeableness of waiting room).

Results: Beyond drop out which greatly influences the quality indicators, some factors systematically explained the different indicators from youth and parents' perspectives. Indeed, variables like first appointment, phone access and having enough time to formulate questions were significantly and systematically related to each quality indicator (satisfaction, therapeutic alliance and perceived treatment efficacy) from youth and parents' perspectives. In contrast, youth age, parents' SES, number of people addressing the patient, number of reasons for addressing the patient, changing therapists or kindness of the secretary were never associated to quality indicators.

Conclusion: This study determined some key predictors which are of great importance to influence quality indicators from youth and parents' perspectives, such as first appointment and allowing

enough time for questions. These results give interesting clinical advice concerning the investment which should be done regarding the preparation of the first appointment. In contrast, changing therapists due to institutional reasons, general factors (number of persons or reasons to consult) as well as socio-demographic ones (age, parents' SES) did not have an influence on the indicators. Thus, this study revealed some important factors which should be carefully taken into account when aiming at enhancing the quality of CAMHS.

PM-061

Family history of psychiatric disorder and autism spectrum disorders: a study about 790 cases

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Background: Autism spectrum disorder or ASD is a neuro developmental disorder with a strong genetic component. Several studies have found an increased incidence of psychiatric disorders in families of children with ASD. These psychiatric disorders can they be part of the broader phenotype of autism?

Objective: To describe the prevalence and nature of psychiatric disorders found in families of children diagnosed with ASD.

Methodology: This is a descriptive retrospective study on all children followed with ASD in child psychiatry consultation Monastir and Mahdia, Tunisia from 2008 to October 2014. The sample size is 790 cases of ASD, the average age is 3 years 5 months (from 1 year 8 months to 18 years) and sex ratio was 8.1 (male). We conducted a record revision to search for family history of psychiatric disorders. The ASD and psychiatric disorders are diagnosed according to the DSM-IV-TR criteria.

Results: A total of 58 % of cases had family history of psychiatric disorders. We found 28 % of cases of simple language delay, an ASD in 8 % of cases, attention deficit disorder/hyperactivity disorder (AD/HD) in 1 % of cases, intellectual deficit in 10 % of cases and five cases of stuttering. Schizophrenia is reported in 6 % of cases and schizoid personality in 2 % of cases. A depressive disorder is noted in 7 % of cases, bipolar disorder in 2 % and three cases of suicide. Anxiety disorders (OCD, GAD, social phobia) had a prevalence of 1 %. There are also three cases of alcoholism, three cases of personality disorder unspecified and a case of abuse. 3 % are followed in psychiatric institutions for unspecified reasons.

Conclusion: Families of children with ASD are clearly more at risk to develop psychiatric disorders. This statement is consolidated every day more with genetic research. But did those finding support the theory of autism broad phenotype?

Keywords: Autism, Psychiatric family history, Broader phenotype.

PM-062

Features of asymmetry of visual attention in children with schizophrenia spectrum disorders

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Introduction: Specific cognitive deficits are the feature of schizophrenia spectrum disorders. Along with the peculiarities of thinking, memory and perception in children with schizophrenia

spectrum disorders observed features of the organization of processes of voluntary attention. We investigated the characteristics of lateralization of visual attention in children with schizophrenia spectrum disorders in comparison with normal developing children

Materials and methods: Group 1 (schizophrenia spectrum disorders): 28 persons, 10 girls, mean age 10.3, diagnoses: F21, F20.8 – children with schizophrenia spectrum disorders. All children were tested at hospital and got psychopharmacologic treatment.

Group 2 (normal development): 64 persons, 25 girls, mean age 9.

Methods: Test to assess of asymmetry visual attention by NN Nikolaenko. The test determines the vector hemispheric preference visual attention, stability, mobility, switching speed of an arbitrary visual attention.

Stimulus material is a sheet of paper with randomly distributed stimuli («A» letter of the alphabet), which are situated among distractors (other characters). The child is asked, quickly scanning the sheet, striking out one of the letters. The amount of symbols is the same in the left and right sides of the sheet. The working time is 1 min.

Results: Children with schizophrenia spectrum disorders characterized by: (1) a decrease in tempo characteristics and productive of activity compared to the control group; (2) The vector of hemisphere asymmetry of visual attention is moved to the right, that is expressed, firstly, in larger number of stimuli found by the left hand (, secondly, the difference between the number of marked stimuli to the left and right was found.

Conclusion and perspective of study

These data, along with data obtained in the study of lateral preference for hand, foot, eye and ear (according to Annette' questionnaire) indicate specific features lateralization of functions in children with schizophrenia spectrum disorders.

The results of this step of our study are preliminary and require verification and in-depth researches on a broader sample of children c schizophrenia spectrum disorders.

PM-063

First episode psychosis and continuous cannabis use: a case report

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Introduction: Recent studies show increased cannabis use in adolescents, more than tobacco. Cannabis use is associated with another substance abuse and early onset of psychotic symptoms, but it is unclear if it is a causal relationship or self-medication in first episode psychosis (FEP). Continuous cannabis use after FEP is associated with worse outcome1.

Objectives: Presenting a case and reviewing the literature to summarize the available information to date on pathogenesis, course and treatment of psychotic symptoms in adolescents patients with cannabis use and relationship with psychotic disorder.

Methodology: Description a case of a 17 year old patient with a history of three years of cannabis use. He experienced an episode of behavior disorders with psychotic symptoms and conceptual disorganization. Was treated with atypical neuroleptics and did not need hospitalization. 472 articles were reviewed in PubMed using the terms 'youth psychosis', 'psychotic symptoms', 'schizophrenia' AND 'cannabis'.

Results: We promoted the cessation of cannabis, pharmacology and psychological treatment. After ten months, total scores of the Positive and Negative Syndrome Scale and the Global Assessment of Functioning were better. The episode may justify the diagnosis

according to DSM IV Drug-induced psychotic disorder with delusions [292.11].

Conclusions: Cannabis after FEP could increase the risk of psychotic disorder, with greater association when we consider the interaction of genetic factors. Reducing cannabis use can delay or prevent some cases of psychosis 2. More longitudinal studies to evaluate patient outcomes are needed.

Keywords: Cannabis use; Young psychosis.

References

1. Clausen LI, Hjorthøj CR, Thorup A, Jeppesen P, Petersen L, Bertelsen M, Nordentoft M (2014) Change in cannabis use, clinical symptoms and social functioning among patients with first-episode psychosis: a 5-year follow-up study of patients in the OPUS trial. *Psychol Med* 44 (1): 117–126.
2. Tosato SI, Lasalvia A, Bonetto C, Mazzoncini R, Cristofalo D, De Santi K, Bertani M, Bissoli S, Lazzarotto L, Marrella G, Lamonaca D, Riolo R, Gardellin F, Urbani A, Tansella M, Ruggeri M; PICOS-VENETO Group (2013) The impact of cannabis use on age of onset and clinical characteristics in first-episode psychotic patients. Data from the Psychosis Incident Cohort Outcome Study (PICOS). *J Psychiatr Res*. 2013 47(4): 438–444.

PM-064

Functional analysis of aggressive behaviors in autism spectrum disorders

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Introduction: Functional analysis allows to identify correlations between environmental factors and the development or maintaining of behavioral problems.

Objectives: To perform a functional analysis of aggressive behaviors in children with autism in order to look for correlations between environmental factors and the evolution of these behaviors.

Methods: 50 children with autistic disorder (AD) were included. Diagnosis was confirmed using the ADI-R, and severity of the disorder was assessed using the CARS. Aggressive behaviors were assessed using the Behavior Problems Inventory. Parents were asked in a semi-structured questionnaire about the conditions chronologically associated before and after the occurrence of the aggressive behaviors. We looked for: life events preceding the onset of aggressive behaviors, triggering factors preceding the occurrence of these behaviors, emotional and behavioral reactions of the parents to these behaviors.

Results: The sex-ratio of our sample was 4.55. The prevalence of aggressive behaviors was 60 %. Aggressive behaviors were stationary over time among 44 % of the children, increasing among 14 % of them and decreasing among 26 %. Aggressive behaviors had disappeared among 16 % of the children at the time of the evaluation. One or more factors have been identified by parents as triggering aggressive behaviors in 80 % of cases: frustration was most frequently reported by (75 %) followed in a decreasing order by jealousy, change in habits, play, when stopping a stereotypy, lack of sleep, hunger and reaction to an aggressive behavior. Parents' reactions were characterized by: forbidding or stopping the behaviors in 75 % of cases, giving away in 16 % of cases and ignoring it in 8 %. There was no statistical link between differ-

ences in parental perceptions of these behaviors and their evolution. Forbidding the behaviors was more associated ($p = 0.04$) to a positive a decrease of the behaviors in opposition to other parental reactions.

Conclusion: Our results confirm the eco-behavioral model in which parental attitudes may play a role as a positive or negative reinforcer of aggressive behavior.

PM-065

Gender differences in clinical features and global functioning in subjects at risk of developing psychosis

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Introduction: Gender differences in the clinical expression of schizophrenia are widely documented. Most of studies reported that males have an earlier age of onset than females. Findings on clinical features are less conclusive. Some authors identified worse severe negative symptoms in men and higher prevalence of affective symptoms in women. Better premorbid and social functioning was associated to women. Little is known about subjects at high risk for psychosis, also called Psychosis Risk Syndrome Subjects (PRSS). The aim of this study is to investigate gender differences at baseline regarding to age of onset, clinical features, social and role functioning in a sample of adolescent PRSS.

Method: Participants were recruited from a prospective, naturalistic and multicentric study conducted in help-seeking child and adolescent population (age 10–17). Inclusion criteria: (1) Attenuated positive or negative symptoms in the previous 12 months (2) Brief limited intermittent psychotic symptoms (3) First or second degree relative with schizophrenia or schizotypal disorder plus impairment of functioning. Exclusion criteria: IQ <70 and a diagnosis of neurodevelopmental disorder. Psychopathology was assessed by The Semistructured Interview for Prodromal Syndromes (SIPS), the Hamilton Rating Scale for Depression (HRSD), and the Young Mania Rating Scale (YMRS). Functioning was evaluated by the Global Assessment of Functioning (GAF), by the Global Functioning Role Scale (GFRS) and the Global Functioning Social Scale (GFSS).

Results: 72 PRSS were included. Females [44 (61 %); age 14.9 ± 1.70] overnumbered and were younger than males [28 (39 %); age 15.46 ± 1.53], but differences were not statistically significant ($p = 0.129$). There were not sex differences on demographic factors at baseline. Male subjects showed significant differences in negative symptoms (SIPS-N: $p = 0.017$). There was no effect of gender on affective symptoms (HRSD $p = 0.529$ and YMRS $p = 0.142$). Males had lower social functioning compared to females, as GFSS scores were significantly worse in males ($p = 0.043$).

Conclusions: These results are consistent with the studies that found gender differences in schizophrenia spectrum disorders. However, only a minority of PRSS develops a psychosis, and we also recruited a youth sample. Therefore, sex differences might be less evident in our sample than in people diagnosed of schizophrenia. For this reason, most studies found no relevant sex differences in people at ultra-high risk of psychosis. Nevertheless, some studies reported worse baseline social and role functioning and high severity of negative symptoms in male in longitudinal analyses. Our results might be on this second hypothesis.

PM-066 Impact of long-term melatonin treatment for sleep disturbances in a child psychiatric population

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Study objective: Numerous studies have shown a beneficial impact of melatonin treatment on sleep disturbances in children, in particular in children with neurodevelopmental disorders such as the autism spectrum disorders (ASD). However, few studies only have assessed long-term clinical efficacy of melatonin treatment in these children. In this open longitudinal study, we have assessed the impact of chronic melatonin treatment on sleep disturbances in a child psychiatric population, depending on the type of sleep disturbance (International Classification of Sleep Disorders—3rd edition) and the underlying child psychiatric disorder.

Methods: Were enrolled in this open trial : all children with a child psychiatric disorder consecutively referred to a specialized sleep consultation for children and adolescents, in for whom melatonin (1) was clinically indicated, (2) was prescribed for the first time, and (3) who had at least two controls visits over a period of at least 2 months. 57 children were included in the study (16 girls; mean age 8.5 years \pm 5.7), treated with melatonin dosages between 0.5 and 3.5 mg.

Results: Children in this child psychiatric population were followed by a specialized somnologist over a period ranging from 3 to 54 months. Twenty-one children had a diagnosis of ASD, 14 of a polyhandicap, 12 of an anxiety or mood disorder, 9 of ADHD and 1 of a learning disorder. Melatonin has been prescribed in different indications: in 43 children for a circadian rhythm disturbance, in 12 for a sleep onset insomnia, in 4 in the context of a restless legs syndrome, and in 4 children for parasomnias. Melatonin demonstrated good clinical efficacy in 95 % of the children, with the largest impact of melatonin treatment being observed on sleep onset disturbances, followed by nocturnal awakenings and daytime symptoms (vigilance, attention). Only 3/57 children did not respond to melatonin treatment initially, 2/57 lost initial benefits over the follow-up period whereas a decrease in efficacy was observed in 7/57 children. There was no statistical difference observed in treatment efficacy of melatonin depending on the underlying child psychiatric condition.

Conclusions: The results of this study underscore that melatonin is a well tolerated and efficient pharmacological tool for specific sleep disorders in children with child psychiatric disorders. Its effects on sleep are independent of the underlying child psychiatric condition, i.e. in this study melatonin was as efficient in ASD than in other child psychiatric conditions.

PM-067 Impact of peer's suicide on mental health of adolescents

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Objectives: This study investigated impact of peer's suicide on mental health of middle-school students. The aim of this study was to describe the acute and long-term impact of post-traumatic stress and grief reaction of adolescents on their mental health and suicidal ideation after being exposed to peer's suicide.

Methods: 37 middle school students who exposed the suicidal death of a friend completed self-report measures to assess levels of depression, grief reaction, post-traumatic stress, suicide ideation at 1 month and 8 month after the peer's suicide.

Results: There are no significant change in mental health scores between 1 and 8 months. Level of posttraumatic stress after 8 month was related with acute grief response. Subjects who experienced clinically significant level of suicidal ideation and posttraumatic stress showed more mental health problems.

Conclusion: The results suggested peer's suicide highly impacted mental health issues of adolescents at a critical time of development. Clinicians should make thorough evaluation of mental health problems for youth who experienced friend's suicide and help them to manage their grief reaction.

Keywords: Peer's suicide, Grief, PTSD.

PM-068 Impact of peer's suicide on mental health of adolescents

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Keywords: Peer's suicide, Grief, PTSD.

PM-069 Impact of trauma due to sexual violence on psychopathology and quality of life in children and adolescents

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Keywords: Sexual violence; Psychopathology; Quality of life.

Objectives: This study was conducted in order to investigate the influence of sexual trauma on the psychopathology and quality of life of children and adolescents in Korea.

Methods: Twenty-seven children and adolescents and their caretakers who entered Kangwon Sunflower Center participated in a cross-sectional study. Participants completed the Korean version of Kiddie-Schedule for Affective Disorders and Schizophrenia-Present and Lifetime Version, Child Behavior Checklist (CBCL), and Child Health Questionnaire-Parent Form-50 (CHQPF-50). Their scores were compared with those of age and sex-matched control groups of 27 healthy children and adolescents.

Results: Victims of sexual violence showed higher t score in Withdrawn, Social problems, Delinquent behavior, Externalizing problems, and Total problems in CBCL, compared with control groups. In CHQ-PF-50, there were lower scores in Bodily pain/discomfort, Behavior, Mental health, Time impact on parent, and Family activities subscales in victims of sexual violence. While Behavior and Family activities subscale showed negative correlation with Delinquent behavior, Externalizing problems, and Total problems in CBCL, Mental health subscale showed negative correlations with Social problems, Delinquent behavior, Externalizing problems, and Total problems. In addition, Time impact on parent subscale showed negative association with Delinquent behavior in CBCL.

Conclusion: The current study provided evidence suggesting that victims of sexual violence had a higher level of psychopathology and lower level of quality of life.

PM-070

Internalized sexual stigma and parents' reactions to coming out in a sample of lesbian and gay adolescents

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Introduction: The coming out (CO) process is an important transition in lesbian and gay (LG) identity development. Revealing to others promotes self-integration, personal empowerment, and is a sign of self- and social acceptance. Besides this, key factors include social support and family acceptance resulting as a protective factor from negative health outcomes in youth (Rothman et al. 2012). However, revealing same sex attraction to parents is the one of the most dreaded steps in LG youth due to the risk of disapproval and rejection (Willoughby et al. 2006). Many studies have demonstrated the relationship between negative parental reactions and elevated levels of internalized sexual stigma. According to the literature, parental negative reaction to CO can be the result of different variables including a lack of cohesion and adaptability in the family system, parents' age; political orientation, level of education, and religiosity.

Aims: This study aims first to identify individual factors that can affect how parents react to their child's disclosure and the differences between mothers' and fathers' responses. Then we examine how parents' reaction influence the LG adolescents' internalized sexual stigma levels.

Methods: We conducted a cross-sectional study in Italy (N = 200) using snowball sampling in order to recruit gay and lesbian young adults. The prerequisites for inclusion were: have already revealed their sexual orientation to both parents; and the parents had to be living together at the time of coming out. We obtained data using a structured questionnaire addressing parents' reactions to CO, religion involvement, political orientation, internalized sexual stigma and disclosure of sexual orientation.

Results: Differences were found in parents' reaction to the CO of their son/daughter, $t(199) = 2.98$, $p < 0.01$, $r = 0.057$. In line with other

studies, mothers answer more negatively to the disclosure than fathers. Mothers with a lesbian daughter reported a more negative reaction to coming out than did fathers with a gay son. High levels of parents' religiosity and paternal right-wing conservatism predict a more negative reaction to coming out, as was found in previous studies (Baiocco et al. 2014); poor family functioning with low levels of cohesion and adaptability correlates with both parents' negative reactions.

Discussion and implications: These results suggest that a negative parental response to CO is related to higher levels of internalized sexual stigma, with the well-known consequences on the adolescents' psychological and sociological health. These results have important implications in clinical and social fields.

PM-071

Internet gaming disorder and its nosological location

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Introduction: In today's society, videogames are an important way of entertainment that continue to increase their market penetration, especially among adolescents and young people who often spend a significant portion of their time playing them.

However, the concept has generated a considerable debate and divergent positions. Thus, while for some authors it is a form of behavioral addiction, others consider it a facet of impulse control disorder or a comorbid disorder of depression or social anxiety.

Methods: Case report and literature review.

Results: We expose the case of 15-year-old boy referred by his pediatrician to our center. He had been diagnosed when he was six with Attention-Deficit Hyperactivity Disorder (mixed type) and Emotional Dysregulation. He is currently taking daily methylphenidate 36 mg and aripiprazole 10 mg.

Coinciding with the start of the school year, he starts investing many hours playing online videogames (up to 8 h a weekday and all the weekend) causing frequent arguments with his family with some occasional episodes of aggression towards their parents. He didn't pass five exams in the first evaluation. In the mental examination, there were no criteria for major depressive disorder or psychosis. No substance abuse existed as well.

Psychological intervention was performed using a cognitive-behavioral approach (based on behavioral modifications techniques and motivational interviews) with sessions once a week during a 13-week-period. After the treatment period, he kept without playing and he could retrieve his exams and was more interested on meeting his friends.

Conclusions: Internet gaming disorder has been included in Section III of the DSM-V (conditions for further study). It specifies that Internet games based on betting, recreational use, social use, professional use and sex pages are not included. When playing with money online, it is a gambling disorder.

More research is needed in this area to achieve consistent data concerning the choice of treatment of Internet gaming disorder, since most of the studies coincide in the need of psychological treatment, but published studies don't have yet neither details of the applied interventions nor its effectiveness.

References

1. Clara Marco y Mariano Cholí (2014). Tratamiento cognitivo-conductual de la adicción a videojuegos de rol online: fundamentos de propuesta de tratamiento y estudio de caso. *Anales de psicología* 30(1) (enero), 46–55

2. Xavier Carbonell (2014). La adicción a los videojuegos en el DSM-5. The Internet Gaming Disorder in the DSM-5. *Adicciones* 26(2)

PM-072

Investigation of speech in adolescents with schizophrenia: pilot study

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Objectives: Authors were aimed to create methodical battery for the most complete psychological evaluation of speech in schizophrenia. Patho-psychological part of the battery performed in the traditions of Russian clinical psychological school of Yu. Polyakov: diagnostics of mental lexicon contents (Syllabic methodic, Kritskaya. V); associative speech activity (Directed verbal associations, Zvereva. N) and domain-informative feature of thinking (Construction of objects, Meleshko. T). Neuropsychological part of this battery evaluates the degree of dysfunction of speech production and perception of speech stimuli (Methodic of assessing speech in aphasia, Akhutina. T).

Subjects: The subject group originally consisted of 78 adolescents (aged 12–16 years). 30 of them were a group of patients with the diagnosis of schizophrenia. Several neuropsychological and patho-psychological methodic were selected for the study.

Results of study: “Syllabic method”

Were analyzed parameters of latency response time, the coefficient of standardness and productivity index. Coefficient of standartness produced the following middle range values: 0.62 to 0.67 for the experimental and control samples. The significance of differences as well confirmed statistically ($U = 489,500$, $p = 0.018$). The average value of the latency response time: 7.5–4.7 for the control and experimental for significant differences in this parameter is confirmed ($U = 53.500$, $p = 0.000$). Productivity parameters were analyzed by Chi square test of Pearson. Average values for this indicator—49.1 to 47.9 for the control and experimental. The significance of differences was confirmed (Chi square = 18.21, $p = 0.0000$).

“Construction of objects”

Were analyzed following parameters: coefficient of standardness, productivity index. Significant differences between the groups in the coefficient of standartness were not found ($U = 616$, $p = 0.282$). The parameter of productivity (6.6 for the control and experimental groups to 6.43) did not differ significantly ($U = 628.500$, $p = 0.241$).

“Directional verbal associations” Was analyzed following parameter—coefficient of standartness. The data indicate significant differences between the controls and patients ($U = 276.500$, $p = 0.000$).

Finally, have been compared the coefficient of standartness for the three methods of patho-psychological part of battery. In general, we can say that the coefficient of stanartness is higher in controls (average values for three methodics—0.68. 0.65 and 0.65 respectively).

PM-073

IQ levels in children and adolescents with different psychopathological syndromes in schizophrenia

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Objective: Analysis of the relation between IQ levels and psychopathological syndromes in children and adolescents with schizophrenia.

Methods: Psychometric evaluation of IQ (Wechsler Intelligence Scale for Children, WISC): Verbal IQ score (VIQ), Performance IQ score (PIQ), Total IQ score (TIQ). Both IQ score and 5 levels of IQ (Total Defect, Defect, Borderline, Middle, and High) were used. Total Defect level was used for patients whose IQ scores can't be evaluated due to extremely low intelligence.

Psychiatric assessment of the psychopathological syndromes: catatonic, neurotic, psychopathy-like.

Mathematical methods of data assessment: Pearson's Chi square for IQ levels, ANOVA for IQ scores comparison.

Subjects: 42 patients (29 males), mean age 11.1 ± 3.0 ; diagnoses: F20.8, F21, F2x.x; syndromes: catatonic (18 patients), neurotic (11 patients), and psychopathy-like (13 patients).

Results: Patients with catatonic syndrome has the lowest IQ score (TIQ = 68.1 ± 12.6 , VIQ = 71.0 ± 15.4 , PIQ = 68.0 ± 14.6), patients with neurotic syndrome—the highest (TIQ = 92.4 ± 18.5 , VIQ = 96.2 ± 19.1 , PIQ = 89.3 ± 17.2), and patients with psychopathy-like syndrome take intermediate position (TIQ = 84.8 ± 11.0 , VIQ = 86.1 ± 16.7 , PIQ = 89.1 ± 15.9).

The ANOVA test reveals significant differences between psychopathological syndromes in either VIQ ($F(2, 35) = 7.56$, $p = 0.002$), or PIQ ($F(2, 31) = 7.18$, $p = 0.003$), or TIQ ($F(2, 31) = 8.98$, $p = 0.001$). Post hoc multiple comparison (by Bonferroni) showed the most pronounced significant differences in TIQ between catatonic and neurotic (MD (mean difference) = -24.3 ; $p = 0.001$), catatonic and psychopathy-like (MD = -16.7 ; $p = 0.029$) syndromes.

The above-mentioned method of analysis was impossible for those of patients with Total Defect IQ level. To resolve this problem Chi square test for 3 syndromes and 5 IQ levels was performed and proved to be significant ($p = 0.008$). Chi square test for 2 syndromes and 5 IQ levels was significant only for catatonic and neurotic ($p = 0.018$), catatonic and psychopathy-like syndromes ($p = 0.013$).

Conclusion: Such clinical characteristic as psychopathological syndrome has proved to be predicted sign of cognitive deficits in patients with schizophrenia or schizotypal disorder early in their psychological development. Children and adolescents with catatonic syndrome have severe cognitive impairment which influence their intelligence and differ them from those with other types of psychopathological syndromes.

PM-074

Is self-injurious behavior more frequent in autism spectrum disorder individuals with aggressive behaviors than in those without aggressive behaviors? Preliminary study

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Introduction: Problems behaviors are relatively common in individuals with autism spectrum disorder (ASD). Such behaviors include aggressive behaviors, self-injurious behaviors (SIB), stereotypic behaviors and noncompliance. Among those, SIB may be regarded as one form of aggression. However, it is not clear whether SIB is related to aggression in ASD until now.

So we investigated whether SIB was more common in ASD individuals with aggressive behaviors compared to those without.

Method: We gathered clinical characteristics of subjects with ASD through a retrospective chart review. They visited our clinic for

treatment of problem behavior. The diagnosis of ASD was made based on DSM-IV-TR by experienced child psychiatrist. In this study, ASD includes autistic disorder, Asperger's disorder, and pervasive developmental disorder NOS. Clinical date of thirty-eight individuals with ASD was gathered. Their age ranged from 6 to 25 years. The problem behavior was classified as aggressive behavior or nonaggressive behavior according to the reports of both caregiver and therapist. And SIB was also reported by both of them. We analyzed the date using Chi square test at p -value of <0.05 .

Results: The mean age of subjects was 12.7 (SD 5.2) years old. There were thirty-one boys (81.6 %) and seven girls (18.4 %). Twenty-five subjects (65.8 %) were classified as group with aggressive problem behavior and thirteen subjects (34.2 %) were classified as group without aggressive problem behavior. Seventeen subjects (44.7 %) showed SIB. Fifteen subjects (39.5 %) showed both aggressive behavior and SIB. Self-injurious behavior was more common in group with aggressive behavior than in group without aggressive behaviors ($p = 0.015$).

Conclusion: In ASD individuals with aggressive behavior problem, SIB was more frequent than in ASD individuals without aggressive behavior problem. Therefore, SIB may be related with aggressive behavior in autism spectrum disorder.

Keywords: Autism spectrum disorder (ASD), Aggression, Self-injurious behavior (SIB).

PM-075 Me, the demon

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Objective: Submit through a case the general aspects of dissociative disorder in adolescents and stand out the importance of assessing comorbidities.

Method: We report the case of a girl of 13, from Romania, brought to the emergency room because of an agitation episode while watching TV with her brothers. Background of Child abuse and nocturnal bed-wetting. Her mother was hospitalized in 2011 by brief dissociative episode vs. reactive psychosis.

We were called for psychiatric evaluation: hectic, incongruous affection, unmotivated laughs and possible visual hallucinations. She fluctuated between moments of lucidity and others of apparent intoxication. She said she was the demon and she had taken pills from her mother to "get out of the way" for "hearing voices", so a nasogastric wash was performed finding remains of pills. In this context her family considered appropriate to make an exorcism because they believed she was possessed.

She was hospitalized in pediatric ICU for a few days. After that she was in a conventional psychiatry ward (for children). The situation was normalized, with a good evolution. She referred a partial amnesia episode and explained feelings of "being out of my body" and even the voices sometimes she said she had been hearing seemed doubtful and fitted into neurotic dye. Psychotic symptoms had not been appreciated. Initially she presented unmotivated laughter, but throughout the interview she said she laughed because she got nervous.

Complementary tests showed normal results. Toxics were negative. Positive for benzodiazepines and escitalopram.

Results: The episode seems to lean more towards a dissociative episode features in the context of PTSD. It would be important to note that all this clinic would be very influenced by the cultural context of

the patient and her family. Treatment at discharge: alprazolam and risperidone.

Conclusions: Differential diagnoses that were considered are: Poisoning with some substance (toxic or drug). Debut of adolescent psychotic episode. Confusional syndrome secondary to intoxication. Dissociative episode. The clinic is consistent with a dissociative episode.

The dissociative disorder usually begins in childhood as a response to traumatic experiences, but less than 8 % are diagnosed at this stage. The literature predicts high level of comorbidity: Sar et al., found that 93.9 % of adolescents with a dissociative disorder have other psychiatric diagnosis, the most prevalent disorder, separation anxiety, major depressive disorder, ADHD, oppositional defiant disorder and PTSD.

Keywords: Dissociation, PTSD, Cultural psychiatry.

PM-076 Munchausen syndrome by proxy with psychiatric features: a case report. Diagnostic and management challenges

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Munchausen syndrome by proxy, as well known as factitious disorder imposed on other (DSM-V), is a form of a child abuse, in which a caregiver (typically a mother) fabricates, exaggerates, or induces health problems in her own child, in order to gain the attention of medical providers and others. Usually the main intention of this behavior is to please her own psychological needs. Even though, the most often fabricated symptoms are somatic, in some cases they can be psychiatric. We would like to present one of these cases. A female patient, 14 years old, arrived to children and adolescence clinical psychiatry unit, having complaints of eating disorder and depression. The girl was referred to a psychiatric ward for the second time. The primary diagnosis was bulimia nervosa and moderate depressive episode. During the first interview, it was noticed that the mother-daughter relationship is disturbed. Family anamnesis was complicated: grandmother of a patient had schizophrenia, mother was raped and sick with severe depression. However, during the assessment of patients mental state and family relationship, the hypothesis was formulated, that the mother herself is fabricating the symptoms of depression—maybe she has Munchausen syndrome?

During hospitalisation, we ascertained that the girl didn't have any symptoms of previously diagnosed illnesses, her behaviour in absence of her mother was adequate.

In this case report we present diagnostic and management challenges of this syndrome, especially one ethical problem of management. This is parentectomy—separating the child from his parent/abuser—does it help or does it cause more psychological problems for the child?

Keywords: Munchausen syndrome by proxy, Manifestation with psychiatric features, Disturbed mother-daughter relationship, Parentectomy.

PM-077 Negative symptoms in child and adolescent population. Review undertaken in connection with a case

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Schizophrenia is a severe mental disorder characterized by positive, negative and cognitive symptoms that influence almost every aspect of the individual, it often starts at the end of adolescence and beginning of adult life. However, it is not uncommon to start at younger ages, defining itself with the same criteria as in adults, but presenting certain features that distinguish them. In this age group, positive symptomatology is frequent but negative is predominant, which seems to be relatively constant and associated with poorer global outcome. And, last but not least, current interventions (both pharmacological and psychosocial) for these have limited benefits.

Objectives: Literature survey of the existing publications and analysis of the implications negative symptomatology has in early and very early onset schizophrenia.

Method: Literature review through Pubmed of negative symptoms in schizophrenia in child and adolescent population in the last 15 years, as well as the presentation of a clinical case.

Results: The case of M. is presented, a 14 year old male with mainly negative psychotic symptoms with, at least, two years of evolution, submitted by the community priest for referring feeling the possession of the devil.

Conclusions: Although there is little specific literature related to negative symptomatology in child and adolescent population, there is evidence of its frequency and of the detrimental impact on the development of the subject.

PM-078

Neurobiology of suicidal behavior in adolescents: the role of serotonin and HPA axis abnormalities

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Background: Epidemiological evidence shows that suicidal behavior, psychiatric illness and substance use are highly comorbid in adolescence with indicators of circular causality. These conditions might share some common biological underpinnings. Identification of these biological mechanisms would be extremely relevant to recognize high-risk subjects and implement targeted strategies to prevent suicides. In the last decades a substantial body of research has identified two main biological risk factors for suicide; deficits in serotonergic neurotransmission and hyperactivity of the hypothalamic-pituitary-adrenal (HPA) axis.

Objective: To critically review up to date literature suggesting a pathophysiological role of serotonin and HPA abnormalities in suicidal behavior in adolescents.

Methods: We conducted a comprehensive review of the studies available in MEDLINE from January 1998 until December 2014 on the role of “serotonin” or “hypothalamic-pituitary-adrenal axis” or “HPA” both in adults’ and adolescents’ “completed suicide”, “suicide attempts” and “suicidal ideation”.

Results: Serotonergic (5-HT) dysfunction has extensively been studied in adults and has been postulated as a biological marker for suicide. Studies on 5-HT conducted in adults and replicated in adolescents have yielded inconsistent results. Until recently, alterations in the HPA axis had been regarded only as an epiphenomenon of the psychiatric disorders or suicidal behaviors but in recent years evidences suggest a role for hyper-function of the HPA axis in the

pathophysiology of suicidal behavior in adolescence, particularly in mood disorders.

Discussion: Results of studies on the neurobiology of suicide conducted in adults should not be extrapolated into adolescent suicide. More work is needed to clarify the role of serotonin and expand knowledge on HPA axis abnormal functioning as potential biological markers of suicidal risk in adolescents. Future research designs should take into account the biological specificities of this life stage and also try to integrate findings in psychological and biological domains.

References

1. Picouto M, Villar F, Braquehais M (2015) The role of serotonin in adolescent suicide: theoretical, methodological, and clinical concerns. *Int J Adolesc Med Health* 27(2)
2. Sher L (2007) The role of the hypothalamic-pituitary-adrenal axis dysfunction in the pathophysiology of alcohol misuse and suicidal behavior in adolescents. *Int J Adolesc Med Health* 19(1):3–9.
3. Pandey G, Dwivedi Y (2012) Neurobiology of teenage suicide. In: Dwivedi Y (ed) *The neurobiological basis of suicide*. Boca Raton (FL) CRC Press, Chapter 15.

PM-079

Non suicidal self injury behaviors in a Portuguese Child and Adolescent Psychiatry Emergency Unit

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Introduction: Self-harm behavior was defined as “behavior with non-fatal outcome, in which the individual intentionally inflicts himself injuries, ingest substances in excessive doses, illicit or recreational drugs, not ingestible substances/objects, in an act that he sees as self-harm “. Non suicidal self injuries (NSSI) were distinguished in this group and represent the destruction of body tissue in the absence of suicidal intent (self-inflicted cuts, burns, scrapes).

Although there are a geographical variation in NSSI behaviors, the European multicenter study CASE pointed to a prevalence of 8.9 % in girls and 2.6 % in boys.

History of self-harm behaviors is an important risk factor to suicide, occurring in up to 40 % of completed suicides. Repetead NSSI are one of the most predictive risk factors for future suicide attempts.

Objectives: The authors proposed to evaluate the prevalence of NSSI in children and adolescents referred to Child and Adolescent Psychiatry Emergency Unit (CAPEU) in Oporto Medical Centre—Portugal in the last 3 years, and to characterize the underlying contexts and associated disorders.

Methods: The authors evaluated the prevalence of NSSI reported by children and adolescents (0–18 years) in all the medical records of the CAPEU from May to August 2012, 2013 and 2014. For the year 2014, variables such as psychopathological diagnoses, associated problems, triggering events, medical, psychiatric and consumption history, and therapeutic approach were analyzed.

Results: There were 441 referrals to CAPEU from May to August in 2012, 412 in 2013 and 355 in 2014. The NSSI prevalence was 2.04 % in 2012, 14.12 % in 2013 and 17.75 in 2014. In 2014 there was a female preponderance (4.7:1), up to 12 years old. 26 adolescents (41.27 %) were referred due to NSSI, while 37 (58.73 %) had another reason for referral. There was a frequent association with recognized precipitating factors, most commonly family conflicts. The most

frequently considered diagnoses were Adjustment Disorder, Conduct Disorder and Anxiety Disorder.

Conclusions: The authors observed, over the last three years, an increase in reported cases of NSSI, which may be due in part to greater awareness of this entity. In 2014 the prevalence was 17.77 %, higher than that reported in the general population, probably due to the clinical and emergency nature of the sample. Important results have been replicated regarding the emergence pattern and characteristics of NSSI in a Portuguese clinical population, reinforcing the importance of increasing attention to their clinical understanding and therapeutic approaches.

PM-080 Physical activity in children with autism spectrum disorders

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Introduction: Autism spectrum disorders (ASD) are a band of life-long neurodevelopmental disorders that affect approximately 1% of the population. Children with ASD typically have difficulty with social communication and restricted repetitive behaviours, which may in turn impact their physical activity.

Methods: An online survey was circulated via social media accounts and parents of children with and without neurodevelopmental disorders were invited to complete it. The survey assessed children's physical activity during a typical school week—how the children travelled to school, structured physical activity during and after school, and sedentary time. Furthermore, children with ASD or dyspraxia and typically developing controls were sent an Actigraph GT3X triaxial accelerometer to monitor physical activity. This was to be worn on the waist for one week. T-tests and ANOVA were performed to evaluate between-group differences.

Results: There were 221 parental responses to the survey. 77 % of children were male, 23 % female; 48 % had a diagnosis of ASD, 24 % Dyspraxia, 22 % typical development and 6 % had other neurodevelopmental disorders. Of children with ASD, 26 % walked to school compared to 37 % of controls and 29 % of children with dyspraxia or other conditions. Children with ASD or dyspraxia spent significantly less time in structured physical activity than controls—61 % of children with ASD spent 2 h or less, compared to 37 % of controls but 68 % of children with dyspraxia ($p < 0.05$). 56 % of children with ASD spent over 6 h per week in sedentary behaviour such as watching television or on a computer, similar to 49 % of children with dyspraxia but significantly more than the controls at 33 % ($p < 0.05$).

Actigraph data was gathered from three children with ASD, three with Dyspraxia and three controls. There were no significant differences in measured physical activity levels between the groups however the ASD group spent less time in the vigorous activity level than the other groups, with a p value approaching significance ($p = 0.0684$).

Conclusion: Results of the survey suggest that children with autism spectrum disorders spent more time in an average week in sedentary activity and less time in structured physical activity, and were less active in general in compared to typically developing controls. Differences in physical activity levels in the three groups have not become apparent by actigraphy, however further study may allow a difference in vigorous activity, such as that associated with structured physical activity and sports participation as demonstrated by the survey, to be objectively highlighted.

PM-081 Prefrontal dysfunction in pediatric Tourette's disorder as measured by near-infrared spectroscopy

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Abstract

Tourette's disorder (TD) is a childhood neuropsychiatric disorder characterized by persistent motor and vocal tics. The prevalence of TD is between 0.05 and 3 %. Despite strong evidence that the pathophysiology of TD involves structural and functional disturbances of the frontal cortex and its connections to subcortical regions, such as the basal ganglia, through frontal cortico-striatal-thalamo-cortical (CSTC) circuits, in vivo imaging studies have produced conflicting results. Recent developments in near-infrared spectroscopy (NIRS) technology have enabled noninvasive assessment of brain function in people with psychiatric disorders.

We asked 10 individuals with pediatric TD and 10 healthy controls who were age- and sex-matched to perform the Stroop color-word task during near-infrared spectroscopy (NIRS). We used prefrontal probes and a 24-channel NIRS machine to measure the relative concentrations of oxyhemoglobin (oxy-Hb) every 0.1 s during the task. We found that oxy-Hb changes in the prefrontal cortex were significantly smaller in the TD group compared with the control group, especially in the left dorsolateral prefrontal cortex. Moreover, The SCWC scores obtained by participants in the TD group were significantly lower than those of the control group. Low SCWC scores have been closely linked with impulsivity. Our research indicates that pediatric TD patients might have prefrontal dysfunction and more impulsive than control participants. The multi-channel NIRS system appears to be a very useful tool for assessing brain function, as it enables non-invasive functional mapping of the cerebral cortex and has much shorter measurement times (about 5 min) compared with other functional brain imaging methodologies.

Keywords: Tourette's disorder, Near-infrared spectroscopy, Left dorsolateral prefrontal cortex, Prefrontal hemodynamic response.

PM-082 Premorbid intelligent quotient (Pre-IQ) as a first episode psychoses predictor

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Background: In First Episode Psychoses (FEP) patients, a relation between early age of onset (EAO) and bad prognostic has been found. Some age of onset predictors related to low Intelligent Quotient (IQ) scores were already found: neurodevelopmental disorders, retard in language acquisition. The schizophrenic adult data gathered suggest that low IQ scores are related with EAO.

Objective: Assess the premorbid intelligent quotient (Pre-IQ) relation to an age of onset (AOO) during a (FEP).

Method: 294 patients with a FEP were included in the study, 220 adult onset psychoses (AAO) and 74 early onset psychoses (EAO), we grouped them in 3 diagnostic groups, 145 Schizophrenia Spectrum Disorder (SSD), 51 Affective psychoses (AfP) and 98 Other psychoses (OP).

Results: Multiple linear regression models with premorbid adjustment, global functioning, sex and obstetric complications as confounding factors were assessed. Pre-IQ was significantly directly related to Age of onset ($B = 0.14$; $\text{sig} = 0.017$; $R^2 = 0.065$) in the whole sample. In the AOS group after splitting by age of onset groups ($B = 0.16$; $\text{sig} = 0.02$; $R^2 = 0.03$) and in the SSD diagnostic group ($B = 0.22$; $\text{sig} = 0.009$; $R^2 = 0.051$). There were no statistically significant relation in EOS group ($\text{sig} = 0.74$), neither in the AfP ($\text{sig} = 0.62$) or OP ($\text{sig} = 0.58$) diagnostic groups.

Conclusion: Pre-IQ is related to AOO in FEP patients, this relation seems to be specific of the adult onset psychoses and Schizophrenia spectrum disorder group.

Keywords: First-episode psychosis; Intelligence; Schizophrenia.

References

1. Ullman VZ, Levine SZ, Reichenberg A, Rabinowitz J (2012) Real-world premorbid functioning in schizophrenia and affective disorders during the early teenage years: a population-based study of school grades and teacher ratings. *Schizophr Res* 136(1–3):13–18.
2. Vourdas A, Pipe R, Corrigan R, Frangou S (2003) Increased developmental deviance and premorbid dysfunction in early onset schizophrenia. *Schizophr Res* 62(1–2):13–22.
3. Khandaker GM, Barnett JH, White IR, Jones PB (2011) A quantitative meta-analysis of population-based studies of premorbid intelligence and schizophrenia. *Schizophr Res* 132(2–3):220–227.

PM-083

Procrastination and personality features of students in healthy and with endogenous pathology

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Objective: To assess the relation between procrastination phenomena and personal parameters (self-esteem, mental well-being) of students in normal and endogenous pathology.

Methods: Procrastination Assessment Scale for Students (PASS), by Solomon & Rothblum, Rosenberg self-esteem scale (RSES), by M. Rosenberg, Warwick-Edinburgh Mental Well-being scale (WEMWBS) by R.Tennant et al. All scales were adapted in Russian population.

Mathematical methods of data assessment: Spearman's rank correlation coefficient, Mann-Whitney U-test.

Subjects: Group 1–60 healthy students of specialised secondary school and graduate school, 18–25 years old.

Group 2–34 patients with endogenous pathology (students of specialised secondary school and graduate school), 18–25 years old.

Results: In PASS we used next factors: frequency, “bad perfectionism”, fear of failure, laziness, self-organization. We obtained significant differences between group 1 and group 2 in factors: laziness (average values: group 1 = 15.8, group 2 = 13.3) and self-organization (average values: group 1 = 17.3, group 2 = 15.3) U-test, $p \leq 0.01$ laziness = 710, U-test, $p \leq 0.05$ self-organization = 772. We didn't find significant differences between group 1 and group 2 in frequency of procrastination.

Assessment of RSES showed significant differences of self-esteem between group 1 and group 2 (average values: group 1 = 30.98, group 2 = 27.6), U-test, $p \leq 0.01$ U = 575. Assessment of WEMWBS showed significant differences of mental well-being between group 1 and group 2 (average values: group 1 = 53.75, group 2 = 50.4), U-test, $p \leq 0.01$ U = 712.

Significant correlations were obtained only in group 1. They are frequency of procrastination and WEMWBS ($r_s = -0.299$, $p \leq 0.05$), “bad perfectionism” and RSES ($r_s = -0.338$, $p \leq 0.05$), fear of failure RSES ($r_s = -0.392$, $p \leq 0.05$), self-organization and RSES ($r_s = 0.276$, $p \leq 0.05$).

Conclusion: We didn't discovered similar connection between factors of procrastination and personal parameters in students groups in normal and endogenous pathology. We find significant differences between group 1 and group 2 at factors of procrastination (laziness, self-organization) and personal parameters (self-esteem, mental well-being). We have found clear and significant correlation between procrastination and personal parameters in normal group, but there were no any correlation between procrastination and personal parameters in patients group. All this indicates that there is different connection between procrastination phenomena and personal parameters (self-esteem, mental well-being) of students in normal and endogenous pathology.

PM-084

Prodromal phase of schizophrenia, a case report

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Objectives: Reviewing the prodromal phase of schizophrenia through a clinical case.

Methods: Case report and literature review.

Results: We report a case of a man of 17 who attends the unit for children and his first contact with psychiatry. The patient took several months irritable, with strange behaviors and weight loss of 11 kgs. No somatic history of interest and denied drugs consumption.

Several months ago the patient left wrestling (sport in which he emphasized significantly), stop hanging out with his friends and his academic performance declines. Most of the time was spent in his room because he fears that something could happen, just maintaining hygiene and fed once a day. His parents said he was very irritable, and sometimes spoke in a disorganized way. The patient said “I feel trapped me”. In the interview was highlighted that he presented a speech struts derailments and contradictory answers. Loss of control of his own activity consistent with phenomena of depersonalization. Some perplexity. Affective flattening. Unmotivated laughter and crazy humor.

Neuroleptic medication was introduced gradually improving disorganized behaviors, showing less irritable and improving family relationships. Complaints of inattention and concentration were reduced, improving school performance with supports and took up wrestling. With regard to his previous state, said “before I was trapped in another world”.

Conclusions: This case presents a consistent clinic with the prodromal phase of schizophrenia. In this phase nonspecific psychotic symptoms, which involve a disruption over the previous conduct of the patient. Symptoms such as depressed mood, anxiety, irritability, suspiciousness, ideas of self-reference, decreased concentration, disorganized thinking, flat affect, diminished motivation, isolation, sleep

disturbance and decreased social functioning are included. In the case that concerns us, probably through early intervention, there was the emergence of schizophrenic outbreak. The patient showed a clear improvement, both as a procedural level, emotional level with recovery of their academic and social activity, although exploration persist gross alterations in the executive functions, working memory and the ability to stay focused [1].

We emphasize the importance of detecting the prodromal phase and the disease usually does not begin in the first psychotic episode with flowery manifestations, but is preceded by a prodrome of variable length [2].

References

1. Linares A (2010) Esquizofrenia una aproximación a su detección temprana. No322. Las tesinas de Belgrano. Departamento de investigaciones
2. Schultze-Lutter F (2009) Subjective Symptoms of Schizophrenia in Research and the Clinic: The Basic Symptom Concept. *Schizophrenia Bull* 35(1):5–8

PM-085

Proposed diagnostic criteria for non-suicidal self-injury (NSSI) for the DSM-5: psychopathological correlates

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NSSI is an increasingly prevalent behavior, especially during adolescence (18 % lifetime prevalence, increasing up to 40–60 % in clinical samples). The DSM-5 recognizes NSSI as a distinct entity. The frequency of the NSSI disorder ranges from 3.1–6.7 % in student/community to 37–50 % in inpatient adolescent samples, and it is associated with Axis I comorbidity, substance use, suicidal behavior, and lower GAF. Objectives: Explore (1) the prevalence of DSM-5 diagnostic criteria among outpatient adolescents with NSSI disorder (DSM-5 group) and with only NSSI behavior (NSSI group); (2) the clinical variables which discriminate between the DSM-5 group, NSSI group, and PC group (psychiatric controls without NSSI behavior).

Method: 267 outpatients, aged 12–17, 63 % male, 86 % white, recruited from an Spanish outpatient clinic, completed the Self-Injurious Thoughts and Behaviors Interview (SITBI; Nock, 2007), Children Depression Inventory (CDI), State-Trait Anger Expression Inventory (STAXI-NA), Strengths and Difficulties Questionnaire (SDQ-Y), Family APGAR, Inventario de Acontecimientos Vitales Estresantes (AVE), Children's Global Assessment Scale (C-GAS). We followed the DSM-5 proposed diagnostic criteria for NSSI (as of November 2012).

Results: DSM-5 group (N = 19, 63.2 % male) reported significantly more NSSI episodes (Criterion A), familial problems as “Psychological precipitant” (Criterion B1), “Preoccupation” (criterion B3), and greater number of “Contingent responses” (Criterion B4), specially engaging in NSSI to get positive reinforcement than the NSSI group (N = 39, 60 % male). No differences in number or types of NSSI methods used between both groups. DSM-5 and NSSI groups were more likely to score above the clinical cut-off point in the CDI, the SDQ-Y behavioral dimension, and lifetime ideation than the PC group (N = 209, 65.5 % male). The DSM-5 group was more likely to report more problems in the SDQ-Y Hyperactive dimension and total score, family APGAR, and number of life events (AVE) than the

NSSI and PC groups. The DSM-5 group showed more problems in the SDQ-Y emotional dimension and (almost significant) lower score in the C-GAS than the PC group. In the logistic regression analyses (DSM-5 vs. PC), Family APGAR remained significant; CDI, SDQ-Y, and AVE were no longer significant.

Discussion: Results support the DSM-5 NSSI disorder. The DSM-5 group had significant differences from the NSSI group in several diagnostic criteria. And we found a continuum of severity from the PC to NSSI to DSM-5 groups. The acceptance of the NSSI diagnosis would improve the conceptualization, detection, treatment, and communication between clinicians of NSSI behavior.

PM-086

Psychiatric symptoms of klinefelter syndrome in boys

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Introduction: Klinefelter syndrome, caused by one or more supernumerary X chromosomes in males, is one of the most common chromosomopathies and has multisystem clinical manifestations. The largest percentage of the diagnoses occurs in adulthood, leaving more than 65 % of total cases undiagnosed through life. The majority of diagnoses in childhood are usually associated with psychiatric disorders.

Objectives: Review of the literature on the psychiatric symptoms of Klinefelter syndrome in boys from the analysis of a clinical case referred by his pediatrician to our centre.

Results: The main reasons for why children visit the doctor are symptoms of psychiatric disorders, although with an atypical presentation in respect to the general population: unspecific behavioral disorders, lack of interest, low capacity of abstraction, delayed psychosexual development and difficulties in emotional expression.

Disorders associated to Klinefelter syndrome that appear with more prevalence than in the general population are: learning disorders, Attention-Deficit Hyperactivity Disorder (inattentive type, specially) and autism spectrum disorders. On the other hand, there is often an important development of affective disorders and isolated psychotic symptoms which do not constitute a well defined disorder by themselves.

All researches carried out to date to explain the pathogenesis of symptoms of Klinefelter syndrome point as the main responsible the deficit of androgens and the role of the supernumerary X chromosome.

Conclusions: Based on these results, it seems essential to consider the possible diagnosis of Klinefelter syndrome in view of the presentation of the reported symptoms. Early diagnosis would enhance a more specific psychiatric treatment and helps to prevent complications and somatic manifestations and to improve overall prognosis.

1. Tartaglia N (2010) The Spectrum of the Behavioral Phenotype in Boys and Adolescents 47, XXY (Klinefelter Syndrome). *Pediatr Endocrinol Rev* 8(01):151–159
2. Bishop D (2011) Autism, language and communication in children with sex chromosome trisomies. *Arch Dis Child* 96(10):954–959
3. Bruining H (2009) Psychiatric Characteristics in a Self-Selected Sample of Boys With Klinefelter Syndrome. *Pediatrics* 123(5):e865–e870

PM-087 Psychoeducation programme for families/caregivers of children with ADHD

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Objectives: Attention Deficit Hyperactivity Disorder (ADHD) is a neurobehavioral disorder of childhood onset characterised by symptoms of inattention, hyperactivity and impulsivity. Diverse studies have point out to the existence of benefits of multimodal treatment in children with ADHD, compared to the exclusively psychopharmacological approach. These benefits would be especially significant in reducing non-ADHD domains, as oppositional/aggressive and internalizing symptoms, social skills, family functioning, or quality of life. Recent clinical guidelines emphasize the importance of PE as part of the multimodal treatment. Despite of this, the number of studies that specifically evaluate the effectiveness of this approach is actually scarce.

Methods: A qualitative review of previous studies evaluating the effectiveness of stringent PE programmes for families of ADHD children was performed. Based on the evidence available, we developed a PE programme for parents/caregivers of children with ADHD that will be conducted shortly in Hospital 12 de Octubre, Madrid (Spain).

Results: To date, only a small number of studies exist regarding the effectiveness of PE. Multiple methodological flaws and a considerable heterogeneity among these studies prevented from drawing definite conclusions. Nevertheless, a positive effect of PE was observed in most available studies regarding ADHD symptoms, pro-social functioning, general children behaviour, parent-children conflicts, and treatment adherence.

Based on results of effectiveness found in this review, we developed a PE programme for parents/caregivers of children (age range 6–12) being attended in the Child and Adolescent Mental health service of Hospital 12 de Octubre in Madrid, and receiving the diagnosis of ADHD any subtype. The programme will be composed of groups of 6–8 families/caregivers who will receive a 6-week 90 min weekly sessions regarding education on the disorder and strategies for managing symptoms, behaviour and comorbidities of children with ADHD.

Conclusions: The actual paradigm of treatment of ADHD comprises a multimodal approach. Although current guidelines emphasize the need for PE interventions, available studies reviewing their effectiveness are scarce.

An important heterogeneity between studies impeded drawing definite conclusions, but a positive effect in different dimensions was observed in most studies. Based on this, we developed a PE programme for parents/caregivers of children with ADHD.

PM-088 Psychometric properties of the behavioral inhibition observation system (bios) in a sample of adolescents

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Background: Behavioural Inhibition (BI) is the temperamental tendency to react with anxiety to the uncertainty. BI is associated to internalizing psychopathology in general and to social anxiety specifically. The Behavioural Inhibition Observation System (BIOS)

is the only scale that allows professionals to obtaining a quick measure of BI from direct observation. The BIOS allows the clinician to rate the BI of the child in only 3 min, taking advantage of the uncertainty with which the child has to deal in their first meeting. Evidence for the reliability and validity of the BIOS has been provided with preschool-age children.

Objective: The present study aims to provide further evidence of the reliability and validity of the BIOS with adolescents.

Method: The BIOS was used after an interview with 256 adolescents aged 12 to 19 years old in the context of a study about social anxiety. In 38 cases, the BIOS was simultaneously rated by 2 researchers in order to test inter-judges reliability. Measures of personality and psychopathology were obtained from the adolescents and their parents.

Results: Overall, results from the present study improve those of the previous one. The factor analysis revealed one single dimension structure. The first factor showed an eigenvalue of 4.64, it explained the 67 % of the total variability and displayed excellent internal consistency ($\alpha = 0.91$). All items were adequately correlated with this dimension (r from 0.65 to 0.92) as well as with the total score, and with the B8 indicator (r from 0.5 to 0.9). Similarly to the original study, in the current case the BIOS' scores showed significant correlations with other measures of BI and related constructs. However, although correlations were in the correct direction in all cases, they were always slight, ranging from 0.2 to 0.3 (e.g., $r = -0.32$ with a measure of extraversion; $r = 0.34$ with a measure of BI). Interestingly, the BIOS' scores were associated to the parental measures of BI but not with the adolescents' ones.

Conclusion: The current study provides further evidence for the reliability of the BIOS. However, although it is well established that different informants do not usually converge more than $r = 0.3$ in the assessment of the same construct, the slight correlations with other measures of social inhibition suggest that this study does not extend the existing evidence for the validity of the BIOS. Further research is needed to conclude about the validity of the BIOS' scores (398 words).

Keywords: Behavioural Inhibition, Social Anxiety, Assessment, Direct observation, Validity, Reliability, Adolescents.

PM-089 Psychopathological correlates of insecure self-esteem

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Background: The assessment of Implicit Self-Esteem (ISE) along with Explicit Self-Esteem (ESE) is usually recommended for a complete perspective of this affective phenomenon. However, although low ESE is clearly associated to psychological impairment, studies about different disorders (e.g., depression, psychosis, social anxiety) stably report that, against expected, there is no relationship between ISE and psychopathology, although the discrepancy between ISE and ESE (i.e., the so-called insecure self-esteem) is indeed associated to different disorders.

Objective: The first aim of the present study is to explore the impairment and the psychopathological profile associated to low ISE. According to literature, insecure (i.e., discrepant ISE-ESE levels) but not implicit self-esteem is associated to psychopathology, so the second aim of this study is to analyze the impairment and psychopathology

associated to insecure self-esteem. Method: A sample of 264 adolescents aged 12 to 19 years old were assessed on measures of ESE, ISE, personality and psychopathology. In contrast to the usual design referred in the literature—comparing the level of ISE between groups with and without psychopathology—here the attention was focused on ISE, so groups with high and low ISE were compared on the level of impairment and psychopathology. In addition, a group with high insecure defensive self-esteem (i.e., high ESE and low ISE), a group with high insecure damaged self-esteem (i.e., low ESE and high ISE), and a group with secure (i.e., non discrepant) self-esteem were also compared on the same measures of personality and psychopathology.

Results: In consistence to previous studies, ISE was not correlated with any measure of psychopathology. By contrast, insecure self-esteem was correlated with several measures of impairment and psychopathology. The group with high damaged self-esteem showed significantly higher levels of depression, anxiety, somatic complaints, and borderline symptoms than the group with defensive self-esteem and the group with consistent self-esteem. Moreover, the group with damaged self-esteem also showed higher levels of self and others' negative image, neuroticism, deficit on reflective function, and insecure fearful-avoidant attachment style, along with lower levels of self and others positive image, agreeableness, consciousness, extraversion, resiliency, and secure attachment style, in comparison to the group with defensive self-esteem and to the group with non discrepant self-esteem.

Conclusion: The profiles of psychopathology and impairment obtained for the groups with damaged and defensive insecure self-esteem are consistent to previous findings. However, ISE is independent from all measures and this is a stable result in literature that requires an explanation (399 words).

Keywords: Implicit self-esteem, Explicit self-esteem, Insecure self-esteem, Psychopathology, Impairment.

PM-090

Psychopathology in children with epilepsy: the role of demographic, seizure, and quality of life factors

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Objectives: To examine the prevalence of psychopathology in children with epilepsy and to study the extent to which demographic, seizure, and quality of life variables are related to psychopathology.

Methods: Seventy-nine children with chronic epilepsy (Mean = 10.06 years, SD = 2.68; Boys = 74.7 %) presenting to the outpatient department of a tertiary care teaching hospital in North India, were recruited. The inclusion criteria for the epilepsy group included an age between 6 to 15 years, epilepsy duration of at least 6 months, and currently on anticonvulsants. Children with severe and moderate retardation were excluded. In addition, an age matched control group of healthy children were also recruited. Psychopathology was assessed by the Childhood Psychopathology Measurement Schedule (CPMS), the Indian adaptation of the Child Behavior Checklist, and the Strengths and Difficulties questionnaire (SDQ, Goodman 1999). Quality of life (QOL) was measured by the Quality of Life in Childhood Epilepsy Questionnaire (QOLCE, Sabaz et al. 2000). Epilepsy-related factors (i.e., seizure type, frequency of seizures, presence of mono/polytherapy, age at epilepsy onset) were obtained from the medical records and a seizure severity score was calculated (Austin et al. 1996). The study was approved by the Ethics committee of the Institute and an informed, written consent was obtained.

Results: The most frequent seizure type was generalized tonic-clonic seizures (61 %), followed by simple partial seizures (34 %) and

absence seizures (5 %). Children with epilepsy had significantly higher scores on the sub-scales of the CPMS as compared to the controls, as well as total CPMS score ($t = 8.74$, $P = 0.000$). Moreover, 27 % of the children with epilepsy had psychopathology scores in the maladjustment range and this was significantly higher than controls ($\chi^2 = 21.12$, $P = 0.000$). On the SDQ, as compared to controls, children with epilepsy had significantly higher emotional ($t = 4.62$, $P = 0.000$), conduct ($t = 7.13$, $P = 0.000$), hyperactivity ($t = 8.04$, $P = 0.000$) and peer problems ($t = 4.96$, $P = 0.000$). In addition, children with epilepsy had a relatively comprised QOL across a range of domains of functioning. Multiple regression analysis revealed that quality of life scores accounted for 37 % of the variance in the psychopathology scores of the children with epilepsy ($F = 46.15$, $P = 0.000$).

Conclusions: Children with epilepsy exhibit significantly more psychopathology than controls and there is a need to monitor multiple domains of functioning in order to provide appropriate interventions.

Keywords: Psychopathology, Epilepsy, India.

PM-091

Psychosis nos in children and adolescents: a systematic review of the “unspecified” gap

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Introduction: Psychotic Disorder Not Otherwise Specified (PsyNOS) and Brief Psychotic Disorder (BrPsy) involve the presence of positive psychotic symptoms without fulfilling criteria for other psychotic disorders (DSM-5) Therefore, PsyNOS and BrPsy are usually diagnoses of exclusion in clinical practice and often neglected in research and in the literature 1, 2, although they are not uncommon during childhood and adolescence, a time when psychiatric disorders frequently emerge.

Methods: We systematically searched PUBMED from database inception until 12/2014 for articles reporting on PsyNOS and BrPsy in samples aged ≤ 19 years old. Authors were contacted to obtain unpublished/missing data. A meta-analysis was conducted to characterize this population socio-demographically and clinically and to determine the progression to other diagnostic entities during follow-up.

Results: Altogether, 30 articles were included encompassing 357 individuals from 12 non-overlapping samples. Youth were mainly Caucasian (40 %), boys (62 %), aged 14.5 (SD = 2.6) years with poor functioning (CGAS = 38 (SD = 11)) and a borderline IQ ($M = 83$ (SD = 16)). Altogether, 21 % had a history of obstetric complications. Comorbidities were common, including externalizing disorders (17 %), post-traumatic stress disorder (15 %), anxiety and depressive disorders (13 %); attention-deficit/hyperactivity disorder (12 %) and substance use disorders (12 %), and. The majority (53 %) received psychotropic treatment at time of assessment, including antipsychotics (38 %), antidepressants (23 %) and/or mood stabilizers (14 %). During follow-up (4 samples, 2–8 years, $M = 32$ months (SD = 18)) only 19.5 % kept the same diagnosis, 9.8 % were in full remission (without requiring pharmacological treatment) and 70.7 % changed to another diagnosis, mainly bipolar disorder (27 %),

schizophrenia (20 %), depression (11 %), schizoaffective disorder (4 %) and personality disorders (4 %).

Conclusion: According to the very scarce literature, youth with PsyNOS and BrPsy were predominantly prepubertal boys with low average IQ, frequent comorbidities and low functioning. Over an average of 3 years, 71 % of youth diagnosed with PsyNOS/BrPsy developed a different severe mental disorder, pointing to the unspecified psychosis diagnosis as a mostly transient condition in youth. Since treatment will vary depending on longer-term outcomes, more research is needed to identify markers and predictors of transition to specific conditions and to test interventions to improve overall outcomes.

1. Correll CU, Smith CW, Auther AM et al (2005) Prospective study of adolescents with subsyndromal psychosis: characteristics and outcome. *J Child Adolesc Psychopharmacol* 15(3):418–33
2. Correll CU, Lencz T, Smith CW et al (2008) Predictors of remission, schizophrenia, and bipolar disorder in adolescents with brief psychotic disorder or psychotic disorder not otherwise specified considered at very high risk for schizophrenia. *J Child Adolesc Psychopharmacol* 18(5):475–90

PM-092

Psychosocial impact in earthquake exposed Greek pupils and their parents

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Background: Natural disasters are traumatic events that may have a serious impact on people's mental health. On January 26 and February 3, 2014, two strong (6 Richter) earthquakes hit Cephalonia island, western Greece and damaged hundreds of buildings mainly close to the epicenter. A great number of residents whose properties had been affected by the earthquake were accommodated in sailboats, tents and pre-fab buildings.

Objectives: This study investigates post traumatic stress disorder (PTSD) in pupils (aged between 10 and 18) and their parents who experienced the earthquakes. It tests the hypothesis that people who lived close to the earthquake epicenter would experience higher levels of PTSD than those who lived further away from epicenter. Differences in levels of child and parental PTSD and social support as well as child emotional and behavioral difficulties were investigated in a cross-sectional, between groups design, 3 months after the two earthquakes.

Methods: Three groups of pupils and their parents participated in the study: 215 parent-child dyads who lived very close to the epicenter (Lixouri), 174 who lived close to the epicenter (Argostoli), and 132 who lived further away to the epicenter (distant villages). Participants were asked to complete a series of questionnaires.

Results: There were no significant differences in child emotional and behavioral difficulties according to parental and child reports between the three groups (parental reports: $p = 0.663$; child reports: $p = 0.794$). Both parents and their children reported that they received satisfactory social support (Lixouri: 87.2 %; Argostoli: 78.4 %; distant villages: 86.9 %). Parents who lived in Lixouri experienced significantly higher levels of PTSD than those who lived in Argostoli ($p < 0.001$) and those who lived further away to epicenter (distant villages) ($p < 0.001$). Furthermore, pupils who lived in Lixouri reported higher levels of PTSD than those who lived further away to the epicenter ($p = 0.033$).

Conclusions: Although there were no differences in child emotional and behavioral problems, child PTSD levels appeared higher in populations who lived very close to the earthquake epicenter. Additionally, parents who lived very close to the epicenter experienced higher levels of PTSD compared to the other two groups.

PM-093

Psychotherapy of a 10 year old boy with dissociative disorder: he was the witness of crooked romantic relationships within the family members

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Introduction: 'Dissociation' is defined as a human capacity that can fulfill an adaptive or maladaptive function in specific circumstances, and which appears to be particularly recruited as a response to trauma in most cultural settings around the World. Dissociative disorders are not uncommon although little is known about their true prevalence. This is mainly because the most symptoms of these disorders are not necessarily brought the medical attention until the functionality is broken. Precipitating factors in childhood include lifestresses of all types, involving either the child directly or the whole family.

In this case study, we present a 10 year old boy exposing behavioral problems and then converting into a different personality in 2 months.

Case: Ali (a pseudonym), a 10 year old elementary student, referred to our Child and Adolescent Psychiatry clinic by his family reporting nervousness, pessimism, anhedonia, thoughtfulness and temperament changes. He also reported amnesia (e.g. having found himself a few times on the room of his sibling after arguments with his parents with no memory of the reason). At the time of intake, Ali reported having heard 3 voices from inside his head since 2 months and having seen the owners of the voices in 3 weeks. He reported that this voices tried to control him, made his behave rebelliously and insisted on him to wash his clothes. He reported that one of the person was looked like his uncle, and having been witnessed of secret romantic relationship between his uncle and little aunt. He was threatened to be killed if he tells the events. The switching to new personality state was easily observed during diagnostic interview following direct inquiry of the interview.

Our treatment was mainly consisted of three steps: stabilization, trauma work, and integration.

Discussion: Dissociative disorders is a chronic, severe and destructive mental problem seemed in different age brackets and independently from the culture and geography, come out where child abuse and neglect formed. The presented case was treated until integration in outpatient therapy only. We considered that early intervention was the most important thing of successful therapy sessions.

PM-094

Psychotic disorders in an inpatient unit of child and adolescent psychiatry: a follow-up study

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Introduction: The inpatient unit of the Department of Child and Adolescent Psychiatry of Oporto Hospital Centre provides care for all patients in the North and Centre regions of Portugal. Psychotic

disorders are among the most prevalent diagnosis in the unit, most of which being first episode psychosis. The follow-up of these patients is made in the same or in other Child and Adolescent Psychiatry Departments until the age of 18, when patients are transferred for continued care in Psychiatric units for adults.

With this study, we intended to acknowledge follow up information on this group of patients from 2 to 7 years after admission in our inpatient unit.

Methods: We conducted a retrospective cohort study, obtaining data for all inpatients with identified affective and non-affective psychotic disorders in our unit between the years of 2008 and 2012.

Using patient records, we collected the following information about the first psychotic episode: sex, age, duration of the inpatient care and diagnosis according to DSM-IV-TR.

For the follow-up information, we consulted the Portuguese Health Data Platform for updated information and performed a questionnaire through telephonic contact to these patients and/or their carers. We aimed to obtain information about current medical care, treatment compliance, repeated psychotic episodes and occupational and personal functioning.

Results: A total of 96 patients received treatment in our unit during the years of 2008 until 2012 for a first episode of psychosis. Nearly half (53 %) were male and the mean age was 15.7 years old. Of the 96 patients, 11 (11.5 %) were diagnosed as having a primary affective disorder. The mean duration of the inpatient care was 30 days. The mean follow-up time was 4.3 years.

Conclusion: This study allowed us to better understand the diagnostic stability and prognosis of the patients that receive treatment in our inpatient unit, promoting a reflection on our current practice. By sharing the results of our study, we aim to allow for a similar exercise to all of the units with an equivalent practice.

PM-095

Reconstruction of identity in adolescents with cancer in Brazil coping strategies and psychosocial impact

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Cancer in adolescence is an especially critical experience. Having a neoplastic disease at this age hardens the construction of personal identity, affecting socialization, and hinders the development of sexual identity. Thus, young people and families need to acquire psychosocial adjustment and resilience skills to facilitate the management of diagnosis and of continuous bodily changes helping them to deal with aggression therapeutic. The psychological impact of cancer can be more devastating during adolescence than at any other stage of life, since the illness and therapeutic responses, mainly aggressive, difficult the construction of self-image and self-esteem. Teen cancer also implies loss of freedom and autonomy in habits and lifestyles, compromising the construction of identity not only by the losses associated with the change in familiar role, but especially at school, with possible fears of rejection by friends due to not participating in social activities as often as before. General objective: To investigate psychosocial impact and coping strategies in the structuring of identity in adolescents with cancer.

Method: According to the research objectives, the following instruments will be applied: the AIDA (Assessment of Identity Development in Adolescent, and qualitative analysis based on semi-structured interviews to be conducted with parents and health professionals. Life

stories of teenagers suffering from neoplastic disease will also be made, and then analyzed through content analysis technique.

Universe: Adolescents aged 12–18 years with cancer, who are receiving treatment in Cancer Institute of São Paulo.

Conclusions: (1) multivariate analyzes may allow a better assessment of coping strategies both in young and their family (2) This study may contribute to understanding the behavior models used by adolescents with oncological disease and parents and that this review could allow healthcare professionals a greater understanding of the patient and their family. We believe that this study, which presents multivariate analyzes, can be a contribution to a better understanding of the concept of coping in adolescents with cancer.

Keywords: Coping strategies, Psychosocial impact, Quality of Life. Funded by: FAPESP—São Paulo Research Foundation

PM-096

Reflective function moderates the association between trauma and symptoms of borderline personality disorder

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Background: Reflective Function (RF) is the capacity to realise and understand the mental states (beliefs, motives, emotions, feelings, needs, expectations) that underpin own and others' behaviour. Impairment in RF affects the capacity to contact, hold and "metabolize" own emotional reactions and to make sense of interpersonal interactions. The association of Borderline Personality Disorder (BPD) to both biographic trauma and to deficit in RF suggests the possibility that RF may moderate the association between trauma and BPD.

Objective: The aim of the present study is to analyze to what extent RF moderates the association between trauma and symptoms of BPD. Method: A sample of 185 adolescents aged 12 to 18 years old were assessed on measures of trauma, BPD (Personality Disorders Questionnaire 4 or PDQ-4, and SCID-II), and deficit on RF (Mentalization Questionnaire or MZQ). Results: Participants who suffered life events with important consequences showed both higher mean score on BPD (PDQ-4 = 21.1 against 18.5 in the control group, $p < 0.0005$; SCID-II = 11 against 7.7 in the control group, $p < 0.0005$) and also more mean deficit on RF (MZQ = 47 against 41.8 in the control group, $p < 0.0005$). Results from Multiple Linear Regression indicate that symptoms of BPD are related to the number of biographic traumas (β on PDQ-4 = 0.25; β on SCID-II = 0.16), to the presence of impairing consequences from these traumatic life events (β on PDQ-4 = 0.38; β on SCID-II = 0.26), and to the duration of the impairment (β on PDQ-4 = 0.40; β on SCID-II = 0.45). However, the association between trauma and BPD is moderated by the presence of deficit in RF (β on MZQ from 0.41 to 0.46) in all cases.

Conclusion: These results suggest that RF moderates the association between trauma and symptoms of BPD also in non-clinical population. This highlights the importance of taking into account RF both in treatment and prevention of consequences of trauma as well as in the onset of symptoms of BPD even in adolescents from non-clinical population (326 words).

Keywords: Reflective Function, Trauma, Borderline Personality symptoms, Adolescence, Non-clinical population.

PM-097**Relationship between alcohol binge drinking and conduct disorders in adolescence**

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Keywords: Alcohol, Binge drinking, Conduct disorders, Adolescence.

Introduction: Alcohol is the drug most commonly used by youths. In early adolescence youths are extremely vulnerable to alcohol initiation. The recent results of ESTUDES survey reveal an important increase of alcohol use in 14–18-year-old students in Spain. Especially binge drinking in the last month was found in 28.2 % of 15 years old boys and 32.6 % of girls; and in 44.8 % of 16 years old boys and 40.4 % of girls. The binge drinking pattern of alcohol use has been associated to aggressive and violent behaviours in adolescents.

Aims: Study the psychopathology associated to alcohol use in adolescent psychiatric inpatients.

Methodology: A sample of adolescent psychiatric inpatients admitted to Hospital Universitario Basurto (Bilbao) and Hospital Universitario Donostia (San Sebastian), Spain, from May to October 2011 were included. Sociodemographical data, history of alcohol use and psychopathology were assessed through medical interview and questionnaires administered to inpatients and parents (CBCL and YSR). Descriptive and bivariate statistical analysis (Chi square test, Student's t-test) were performed.

Results: A total of 48 adolescents (56.25 % male; mean age: 15.33; SD = 1.12) were included.

- 56.3 % drank alcohol, being on a weekend basis the most frequent
- 4.2 % started to drink alcohol before age 10; 29.2 % between 10–13 years; and 29.2 % between 14–15 years.
- Alcohol binge drinking was found in 63 %: 37 % of adolescents drank more than 10 standard drinks the days they use alcohol and 26 % drank between 6–10 (1 standard drink = 10 g of alcohol)
- Statistically significant differences between alcohol use and the subscale of criminal behaviour in CBCL ($p = 0.010$) and in YRS ($p = 0.001$) were found.
- Statistically significant differences between alcohol use and the subscale of social problems were found only in CBCL ($p = 0.054$), but not in YSR.

Conclusions:

- Alcohol use in adolescence is a common habit.
- Binge drinking pattern of alcohol use is also common in adolescence.
- In our sample, alcohol use has relationship with behaviour disorders (social problems and criminal conducts).

PM-098**Reliability and validity of a brief interview for assessing reflective function in the adolescence: the adolescent mentalization interview (AMI)**

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Background: Reflective Function (RF) or mentalization is the human capacity to identify the mental states (i.e., emotions, feelings, beliefs, desires, needs) that underpin and make sense of human behaviour. The most used measure of RF is the Fonagy and colleague's Reflective Function Scale (RFS), but it requires of several weeks to assess every participant. The growing evidence for the association of RF to psychopathology enhances the importance of looking for more cost-efficient measures.

Objective: To provide preliminary evidence for the reliability and validity of the new Adolescent Mentalization Interview (AMI).

Method: The AMI was constructed after a deep analysis of the construct of RF, the Fonagy's RFS, and other interviews designed to explore complex phenomena such as trauma or attachment style. The AMI consists of two guided exercises structured in 7 questions. The first one asks the adolescent about the dynamics of mental states on the basis of a fictitious illustrated story. The second one asks about the mental states of the participant in relation to two Very Close Others (VCO) (e.g., parents, boy-/girlfriend, best friends) previously chosen by him or her. The interview was used with 256 adolescents aged 12 to 19 years old (50.6 % of girls) in the context of a study about social anxiety.

Results: The factor analysis revealed one single dimension structure, which explained the 64 % of the total variability and displayed excellent internal consistency ($\alpha = 0.90$). All items were perfectly correlated with this dimension (r from 0.75 to 0.83). A second analysis with Varimax rotation showed two possible factors regarding the two parts of the interview (i.e., the first one accounting for the 41 % of total variability; $\alpha = 0.85$; and the second part accounting for the 33 % of the total variability; $\alpha = 0.84$). Inter-judge reliability was also good (ICC ranging from 0.60 to 0.94 for the individual items; $r = 0.90$ for the total score). However, nor the individual items neither the different total scores were correlated with self-reported measures of RF, similar constructs (such as Emotional Intelligence), or related constructs (such as Borderline Personality).

Conclusion: Given that RF and EI may be necessary for correctly self-reporting a measure of these constructs, it is possible that the self-reported measures of RF and similar constructs may not be gold-standards, or they may even be biased, especially in those cases with low RF. Although preliminary results support excellent AMI's reliability, further evidence is needed to support the validity of this new instrument (399 words).

Keywords: Reflective Function, Interview, Assessment, Cost-efficient measures.

PM-099**Reliability and validity of a brief self-report of reflective function**

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Background: The growing interest in Reflective Function (RF), i.e., the ability to identify the mental states that underpin human behaviour (i.e., intentions, feelings, desires, motives) highlights the importance of having cost-efficient measures for this capacity. Fonagy's Reflective Function Scale is a widely used procedure, but it requires of several weeks to obtain a score of RF.

Objective: The present study aims to analyse the psychometric properties of the Brief self-report of Reflective Function (BRF), a very short self-reported instrument based on 4 Lickert scales.

Method: The BRF is inspired in short instruments, such as the Relationship Questionnaire (RQ), and provides the participant with 4 brief descriptions about own and others' mental states to then ask about the agreement with every statement. The BRF was used with 462 adolescents aged 12 to 19 years old (50.6 % of females) in the context of a study about social anxiety.

Results: The factor analysis showed that BRF is structured in one single dimension that accounts for the 54 % of the total variability. Items 2 to 4, (referred to others' mental states) showed high correlations with this dimension (from $r = 0.76$ to $r = 0.85$), and item 1 (referred to own mental states) showed a moderate correlation ($r = 0.45$). The internal consistency (Cronbach's $\alpha = 0.69$) was considerably improved ($\alpha = 0.76$) if the first item was not taken into account. Therefore, two total scores were obtained, one based on the sum of all the four items, and another one based only in the items referred to other's (2 to 4). Test-retest reliability was good both for the items (CCI from 0.47 to 0.62) and for the total scores (r between 0.47 and 0.50). BRF also showed slight but significant correlations with other measures of RF (r from -0.26 to -0.35 with the Mentalization Questionnaire, which evaluates deficit on RF; and $r = 0.25$ with an interview). Positive correlations with measures of similar constructs (i.e., Emotional Intelligence, $r = 0.43$), and with measures of related constructs (i.e., Resilience, $r = 0.34$) were evidence for convergent validity.

Conclusion: The present study provides evidence for the reliability of the BRF based on the internal consistency and on the test-retest. Preliminary evidence for the convergent and construct validity is also presented. However, given that RF is probably needed to reliably self-report RF, the level of RF may correlate with the reliability of the self-report, so further research is needed to explore whether RF can be really self-evaluated, especially in cases of deficit.

PM-100

Reliability and validity of a brief interview for assessing reflective function in the adolescence: the adolescent mentalization interview (AMI)

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Background: Reflective Function (RF) or mentalization is the human capacity to identify the mental states (i.e., emotions, feelings, beliefs, desires, needs) that underpin and make sense of human behaviour. The most used measure of RF is the Fonagy and colleague's Reflective Function Scale (RFS), but it requires of several weeks to assess every participant. The growing evidence for the association of RF to psychopathology enhances the importance of looking for more cost-efficient measures.

Objective: To provide preliminary evidence for the reliability and validity of the new Adolescent Mentalization Interview (AMI).

Method: The AMI was constructed after a deep analysis of the construct of RF, the Fonagy's RFS, and other interviews designed to explore complex phenomena such as trauma or attachment style. The AMI consists of two guided exercises structured in 7 questions. The first one asks the adolescent about the dynamics of mental states on the basis of a fictitious illustrated story. The second one asks about the mental states of the participant in relation to two Very Close Others (VCO) (e.g., parents, boy-/girlfriend, best friends) previously chosen by him or her. The interview was used with 256 adolescents aged 12 to 19 years old (50.6 % of girls) in the context of a study about social anxiety.

Results: The factor analysis revealed one single dimension structure, which explained the 64 % of the total variability and displayed

excellent internal consistency ($\alpha = 0.90$). All items were perfectly correlated with this dimension (r from 0.75 to 0.83). A second analysis with Varimax rotation showed two possible factors regarding the two parts of the interview (i.e., the first one accounting for the 41 % of total variability; $\alpha = 0.85$; and the second part accounting for the 33 % of the total variability; $\alpha = 0.84$). Inter-judge reliability was also good (ICC ranging from 0.60 to 0.94 for the individual items; $r = 0.90$ for the total score). However, nor the individual items neither the different total scores were correlated with self-reported measures of RF, similar constructs (such as Emotional Intelligence), or related constructs (such as Borderline Personality).

Conclusion: Given that RF and EI may be necessary for correctly self-reporting a measure of these constructs, it is possible that the self-reported measures of RF and similar constructs may not be gold-standards, or they may even be biased, especially in those cases with low RF. Although preliminary results support excellent AMI's reliability, further evidence is needed to support the validity of this new instrument (399 words).

Keywords: Reflective Function, Interview, Assessment, Cost-efficient measures.

PM-101

Retrospective study of clinical, demographic and psychosocial characteristics of hospitalized children and adolescents with a psychotic disorder

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Background: An increased rate of premorbid developmental deficits and social impairments have been associated with psychotic disorders in children and adolescents. However, the significance of these premorbid impairments as risk factors in developing psychosis has not been yet established. Recent literature mostly focuses on familial liability, and developmental aspects of psychotic phenomena, i.e., hallucinations, delusions, and thought disorder.

Objectives: To examine the clinical, developmental and psychopathological features as well as to describe the psychopharmaceutical interventions.

Methods: We conducted a retrospective study on a total of 70 consecutive hospitalized patients, whose ages were between 10 and 16 years, with first-episode child- or adolescent-onset psychosis, so as their relapses. Participants had been admitted in the inpatient unit of the Department of Child Psychiatry, Athens University Medical School, Aghia Sophia Children's Hospital, between 1997 and 2014. Clinical and demographic information were extracted from the patients' medical records using a structured coding sheet specifically designed for the study. Premorbid development, family assessment and general functioning were recorded from medical records by trained clinicians with the use of a pre-established form. We compared patients, on demographic variables, medical and psychiatric history, number of medication, cognitive state and functioning.

Results: Of the 70 patients of the sample, 38 % were male and the mean age was 13 years. 23 % of the participants had presented deficits in language development and 73.4 % reported major difficulties in their social skills. Furthermore they experienced at least one traumatic life event in the last year before their psychotic break. Furthermore, delusions and hallucinations were the predominant features, with formal thought disorder, mobility and negative symptoms being also present.

PM-102**Same or diametrical relationships between autistic and schizotypy traits? Implication for autism and schizophrenia spectrum research**

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The autism (ASp) and schizophrenia spectrum (SSp) are mainly treated like distinct entities, despite common historical roots and clinical features. Confusion might even lead to misdiagnoses. We experience an ongoing debate between theories relating and distinguishing between ASp and SSp. To this aim, research also measures personality traits in the general population as a proxy for illness-relevant markers. Both autism and schizotypy traits are qualitatively similar though quantitatively milder to those experienced by patients. They also have a genetic component. Research using such personality trait measures found that (i) higher negative schizotypy related to higher autistic social deficits, (ii) higher positive schizotypy related to higher autistic attention to details, and (iii) higher positive schizotypy related to lower autistic imagination deficits. Most important here, the latter observation would support the notion that ASp and SSp differ diametrically regarding social cognition. To test whether these relationships replicate in French speakers, we assessed the French Autism Spectrum Quotient (AQ, Sonié et al. 2011) and the French O-LIFE Short (sO-Life, Sierro et al. in press) in 921 French-speaking undergraduate students. We applied common psychometric methods to validate the French AQ (confirmatory factor analysis) and to assess the relationships between the AQ and sO-LIFE (i.e., zero-order correlations, semipartial correlations; principal component analyses [PCAs]). Results showed that our AQ data best fitted the 5-factor solution from Kloosterman et al. (2011). Applying this solution and the original one by Baron-Cohen et al. (2001), our zero-order correlations, semipartial correlations and PCA results replicated that (i) higher negative schizotypy related to higher autistic social deficits, (ii) higher positive schizotypy related to higher autistic attention to details, and (iii) higher positive schizotypy related to lower autistic deficits in imagination and communication/mindreading. These results replicate in a French sample that most autistic and schizotypal dimensions share a considerable amount of variance, while high positive schizotypy goes along with reduced interpersonal autistic deficits (or in other words social cognitive deficits). As such, this latter relationship supports Crespi and Badcock's (2008) theory that ASp and SSp lie on opposite ends of a social cognition spectrum, likely representing a hypo- versus hyper-mentalism continuum. For future studies, we would benefit from a psychometrically improved autism trait questionnaire and individual PCA-scores (see also Dinsdale et al. 2013) that could enhance our ability to distinguish between ASp- and SSp-related traits.

PM-103**SDQ Dimensions are associated with 2-year positive and negative symptoms in early onset psychosis**

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Purpose of the study: The Strengths and Difficulties Questionnaire (SDQ) is a brief behavioural screening questionnaire which includes

25 items on psychological attributes, divided into five different subscales: emotional, hyperactivity, prosocial, problems with peers and behaviour. The aim of this study is to use the scale as a measure of prognostic value in a sample of adolescents with a first psychotic episode.

Methods: The Child and Adolescent First- Episode Sample (CAFEPS) sample included 110 children and adolescents with a diagnosis of a first psychotic episode and 98 matched healthy control subjects who were followed for 2 years. After confirming normality of the data, scores in the SDQ subscales at baseline and 2-year follow-up were compared between patients and controls using Student's t tests. Pearson's correlations and stepwise linear regression models were used to analyze the association between baseline SDQ subscales and 2-year clinical and functional scales.

Results: 110 patients (age 15.53 ± 1.83 years, 67.3 % male) and 98 controls (age 15.18 ± 1.99 years, 65.3 % male) comprised the study sample. At baseline, patients with early-onset psychosis (EOP) showed significantly higher scores than controls in emotional ($p < 0.001$), behaviour ($p < 0.001$), problems with peers ($p < 0.001$) and prosocial ($p < 0.004$) dimensions. At 2-year follow-up, the differences in the emotional and prosocial subscales remained significant ($p < 0.01$). In patients with EOP a positive correlation was found between the behaviour dimension at baseline and the Positive and Negative Syndrome Scale (PANSS) positive subscale ($r = 0.268$, $p < 0.023$) at the 2-year follow-up and the problems with peers dimension at baseline and the total PANSS ($r = 0.271$, $p < 0.022$) at the 2-year follow-up. A negative correlation was found between the prosocial dimension at baseline and the PANSS negative subscale ($r = -0.283$, $p < 0.017$). Controlling for age, sex, diagnosis, baseline GAF and baseline PANSS, the "problems with peers" dimension at baseline predicted the positive subscale of the PANSS at the 2-year follow-up ($r^2 = 0.075$, $p < 0.023$). Controlling for the same covariates, the "problems with peers" and the "prosocial" dimension at baseline predicted the negative subscale of the PANSS at the 2-year follow-up ($r^2 = 0.258$, $p < 0.001$ and $r^2 = 0.207$, $p < 0.001$).

Conclusions: In this clinical sample of adolescents with first-episode psychosis more problems with peers at the onset were associated with more positive and negative symptoms at 2-year follow-up, whilst poorer prosocial preadjustment predicted more negative symptomatology. The inclusion of dimensional measures in the assessment of young people with EOP could be helpful for the prediction of some clinical outcomes during follow-up.

PM-104**Self cutting in psychiatric adolescent patients: a case-control study**

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Non-suicidal self-injury (NSSI), defined as the deliberate destruction of body tissue without suicidal intent [1], is a common and multifaceted phenomenon among adolescents as well as actually representing a major health issue in this critical age.

In the previous studies, several psychopathological conditions have proven to be potentially implicated in the origin and in the development of this behavior (e.g., DSM axis I/II disorders). A better understanding of self-harm comorbidities is therefore crucial to improve our knowledge in terms of assessment, treatment and prevention.

The aim of the current study is to provide a more depth analysis of the broad range of psychopathological correlates of the NSSI. More in

detail, we focused our attention on the inter occurring relationships among NSSI and alexithymia, impulsivity, depression, emotional and behavioral problems in adolescents.

In order to reach our goal, we conducted during the last 12 months a case-control study: the clinical sample ($n = 35$, aged 12 to 18) included adolescents who attended our Child and Adolescent Psychiatric Service in Padua in 2014 for self-injurious behavior, while the control group ($n = 80$) has been selected from cohorts of 13- to 18-years old adolescents who, at the time of the study, were attending a local high school.

The collected data include six structured self-reporting questionnaires, five of which filled by the participants: the Youth Self-Report (YSR) for adolescents aged 11–18 years, the Barratt Impulsiveness Scale (BIS-11), the 20-item Toronto Alexithymia Scale (TAS-20), the Children's Depression Inventory (CDI) and the Symptom Checklist-90-R (SCL-90-R). Additionally, we asked the parents (or the legal guardian) to compile the Child Behavior Check List (CBCL). Data analysis is working in progress.

[1] Nock MK (2010) Self-injury. *Ann Rev Clin Psychol* 27:339–363

PM-105

Sensory phenomena in obsessive compulsive disorder: children and adolescent study

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Introduction: Sensory phenomena is a term used to define uncomfortable or disturbing sensations, perceptions, feelings or urges that either precede or accompany repetitive behaviors such as compulsions or tics. Obsessive Compulsive Disorder (OCD) patients might feel driven to repeat compulsions until they experience a sense of relief from these uncomfortable sensations. Sensory phenomena can be divided into physical and mental. Evaluation of the presence and severity of sensory phenomena is relevant because some studies have reported that patients with early-onset and tic related OCD show more sensory phenomena and some report that these sensory phenomena cause even more distress than the compulsions.

Objectives: Evaluate the presence of sensory phenomena in OCD children and adolescents.

Methods: Twenty outpatients, meeting Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, criteria for OCD, were assessed with the University of São Paulo-Sensory Phenomena Scale, Children's Yale-Brown Obsessive-Compulsive Scale, Dimensional Yale-Brown Obsessive-Compulsive Scale and Yale Global Tic Severity Scale.

Results: Children and adolescents observed to date were aged between 6 and 17 years. Fifty-six percent were male. Patients with early-onset and tic related OCD show more sensory phenomena than others, according to literature. Due to small sample, the analysis is only descriptive.

Conclusions: In observation of OCD patient, especially in pediatric age, is extremely important to evaluate sensory-phenomena, and take it into consideration in the treatment.

ARTIGOS

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1.1. Phenomenology of OCD: Lessons from a large multicenter study and implications for ICD-11.

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Author information

Abstract

This study aimed to investigate the phenomenology of obsessive-compulsive disorder (OCD), addressing specific questions about the nature of obsessions and compulsions, and to contribute to the World Health Organization's (WHO) revision of OCD diagnostic guidelines. Data from 1001 patients from the Brazilian Research Consortium on Obsessive-Compulsive Spectrum Disorders were used. Patients were evaluated by trained clinicians using validated instruments, including the Dimensional Yale-Brown Obsessive-Compulsive Scale, the University of Sao Paulo Sensory Phenomena Scale, and the Brown Assessment of Beliefs Scale. The aims were to compare the types of sensory phenomena (SP, subjective experiences that precede or accompany compulsions) in OCD patients with and without tic disorders and to determine the frequency of mental compulsions, the co-occurrence of obsessions and compulsions, and the range of insight. SP were common in the whole sample, but patients with tic disorders were more likely to have physical sensations and urges only. Mental compulsions occurred in the majority of OCD patients. It was extremely rare for OCD patients to have obsessions without compulsions. A wide range of insight into OCD beliefs was observed, with a small subset presenting no insight. The data generated from this large sample will help practicing clinicians appreciate the full range of OCD symptoms and confirm prior studies in smaller samples the degree to which insight varies. These findings also support specific revisions to the WHO's diagnostic guidelines for OCD, such as describing sensory phenomena, mental compulsions and level of insight, so that the world-wide recognition of this disabling disorder is increased.

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2. [Treatment-refractory OCD from the viewpoint of obsessive-compulsive spectrum disorders: impact of comorbid child and adolescent psychiatric disorders].

[Article in Japanese]

Y. Kano

Author information

Abstract

More than a half of patients with OCD are classified as early-onset. Early-onset OCD has been indicated to be associated with a greater OCD global severity and more frequently comorbid with tic disorders and other obsessive-compulsive (OC) spectrum disorders, compared with late-onset OCD. Early-onset OCD patients with severe impairment caused by both OC symptoms and comorbid OC spectrum disorders may be identified as being refractory. Tic disorders and autism spectrum disorder (ASD) are child and adolescent psychiatric disorders included in OC spectrum disorders. OCD comorbid with chronic tic disorders including Tourette syndrome (TS) is specified as tic-related OCD. Tic-related OCD is characterized by the high prevalence of early-onset and sensory phenomena including "just right" feeling. Self-injurious behaviors (SIB) such as head banging and body punching often occur in patients with TS. The patients' concern about SIB is likely to trigger them, suggesting that an impulse-control problem is a feature of TS. More than a half of patients with TS have OC symptoms. When OC symptoms in patients with TS were assessed with a dimensional approach, symmetry dimension symptoms were found most frequently over the lifetime. On the other hand, the severity of aggression dimension symptoms was the most stable during the course among all dimensions. Aggression dimension symptoms also exhibited a close relationship with impairment of global functioning and sensory phenomena. This tendency may be characteristic of tic-related OCD. It is sometimes difficult to differentiate between OC symptoms and restricted, repetitive behaviors which are core symptoms of ASD. Recently, ego-dystonia and insight

are considered non-essential to diagnose OCD, whereas high-functioning and/or atypical ASD is recognized as being more prevalent than previously estimated. In this situation, attention to comorbidity of OCD and ASD is increasing, and the prevalence of OCD in children and adolescents with ASD was reported to be about 20 %. One study on the impact of comorbid ASD in adults with OCD indicated that comorbid patients had higher scores for the Autism Questionnaire (AQ) subscales of attention switching and imagination but showed little difference in OC symptoms except for the predominance of compulsion compared to patients with pure OCD. “Just right” feeling and impulse-control problems were evident in OC patients comorbid with both ASD and TS. Out of five adults with TS who underwent deep brain stimulation (DBS) because of refractory tics, four had impulse-control problems including SIB, leading to very severe physical injuries in two patients. After DBS, tics and SIB improved in all patients; however, one patient experienced their re-aggravation. To improve understanding of and treatment/support for refractory OCD, OC spectrum disorders should also be considered.

(2012) *Psychiatry Res* 197(3):253–258. doi: 10.1016/j.psychres.2011.09.017. Epub 2012 Feb 22.

3. Sensory phenomena associated with repetitive behaviors in obsessive-compulsive disorder: an exploratory study of 1001 patients.

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Author information

Abstract

A substantial number of patients with obsessive-compulsive disorder (OCD) report compulsions that are preceded not by obsessions but by subjective experiences known as sensory phenomena. This study aimed to investigate the frequency, severity, and age at onset of sensory phenomena in OCD, as well as to compare OCD patients with and without sensory phenomena in terms of clinical characteristics. We assessed 1001 consecutive OCD patients, using instruments designed to evaluate the frequency/severity of OC symptoms, tics, anxiety, depression, level of insight and presence/severity of sensory phenomena. All together, 651 (65.0 %) subjects reported at least one type of sensory phenomena preceding the repetitive behaviors. Considering the sensory phenomena subtypes, 371 (57.0 %) patients had musculoskeletal sensations, 519 (79.7 %) had externally triggered “just-right” perceptions, 176 (27.0 %) presented internally triggered “just right,” 144 (22.1 %) had an “energy release,” and 240 (36.9 %) patients had an “urge only” phenomenon. Sensory phenomena were described as being as more severe than were obsessions by 102 (15.7 %) patients. Logistic regression analysis showed that the following characteristics were associated with the presence of sensory phenomena: higher frequency and greater severity of the symmetry/ordering/arranging and contamination/washing symptom dimensions; comorbid Tourette syndrome, and a family history of tic disorders. These data suggest that sensory phenomena constitute a poorly understood psychopathological aspect of OCD that merits further investigation.

(2006) *Compr Psychiatry* 47(4):276–281. Epub 2006 Apr 19.

4. Clinical features associated with treatment response in obsessive-compulsive disorder.

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Author information

Abstract

Objective: This study aims to investigate the effect of sociodemographic and clinical features on the short-term response to pharmacological treatment in obsessive-compulsive disorder (OCD). We focused especially on investigating factors previously associated with poorer prognosis, such as comorbidity with tic disorders, early onset of symptoms, and sensory phenomena preceding compulsions, which have been described as common in both tic-related and early-onset OCD.

Method: The study involved 41 consecutive adult patients with OCD diagnosed according to Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) criteria and was conducted at the OCD Spectrum Disorders Clinic of the University of Sao Paulo School of Medicine in São Paulo, Brazil, between January of 2000 and December of 2001. All patients were treated exclusively with oral clomipramine for 14 weeks. Treatment response, measured for Yale-Brown Obsessive-Compulsive Scale score decrease from baseline, was assessed by an investigator blinded as to the variables of interest present.

Results: Linear regression analysis showed that having a partner and sensory phenomena preceding compulsions were associated with better response to clomipramine treatment ($P = 0.04$ and $P = 0.002$, respectively). Tic comorbidity and early onset of symptoms were not associated with poorer response.

Conclusions: In OCD, having a partner and sensory phenomena preceding compulsions seem to be associated with a favorable response to pharmacological treatment.

PM-106

Sluggish cognitive tempo: new disorder or a diagnostic tool?

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Introduction: The Sluggish Cognitive Tempo (SCT) concept was first defined by Carlson in 1986, related to attention impairment in children with hypoactive appearance. Decades before descriptive studies had separated it from the Attention Deficit/Hyperactivity Disorder under the DSM-III diagnostic of Attention Deficit Disorder subtype.

Studies described older age in children with SCT, lower parent educational level and family income than children without SCT. They presented partial comorbidity with ADHD, high presence of internalizing symptomatology and executive functioning deficits (Garner 2010; Barkley 2013; Becker 2013). A higher risk to prenatal injury and lower IQ were also seen (Graham 2013).

Objective: The main objective was to study the SCT dimension in an ADHD sample from a larger fMRI study comparing predominantly Inattentive with Combined subtypes and to analyse clinical and neuropsychological characteristics.

Methods: All participants ($n = 63$) were assessed with a standardized clinical interview (Kiddie-SADS-PL) and clinical questionnaires were administered to teachers (T) and parents (P) (Conners' Rating Scales 3rd edition, Achenbach CBCL and TRF scales, ADHD Rating Scale and Social Communication Questionnaire)

A wide neuropsychological evaluation was administered: Wechsler Intelligence Scale for Children-IV, Rey-Osterrieth Figure Test, and reading ability evaluation were administered previously to exclude intellectual and learning disabilities; measures of working memory, processing speed, planning, sustained attention and response inhibition were administered to compare the cognitive performance of both groups.

SCT categorization criteria were established with Achenbach SCT subscale when both T and P subscores reached a typical score of 65; subgroup of no-SCT should score under 60. 37 children composed the final sample.

Results: Significant differences were found between groups in internalizing and externalizing problems (INT $p = 0.002$; EXT $p < 0.004$) described by P and T ($p.0.04$) and in visual-spatial working memory (WMS-III Spatial Localization test: Direct score = 0.011; Total score = 0.019)

Conclusions: Results only showed a worse performance in visual-spatial working memory tasks in the SCT group as well as increased internalizing and externalizing symptomatology.

Limitations: The exclusion of any comorbid condition, any learning disability and IQ < 80, and the use of a screening tool for establish the SCT subgroups increased internal validity but reduced ecological validity of the sample.

Acknowledgments: This study was conducted thanks to Fundació Marató TV3.2009 and Instituto de Salud Carlos III2011

PM-107

Soft signs in development of problematic sexual behavior of children

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Soft signs in development of problematic sexual behavior of children

Not just since the Kinseys research in the early 50s of the last century (e.g. Kinsey et al. 1954; 1955) we know about the fact that sexual behavior of children in general is common and “normal”, and the research of the last years shows a wide variety of manners even in prepubertal childhood (e.g. Friedrich et al. 1998). The clinical practitioner has to estimate the clinical relevance of observed behavior, not just in general but case by case. Knowing the poor validity of a single behavior we need more facts to assess a psychiatric endangerment. Besides a traumatic cause, like sexual abuse, our knowledge about nature and the development of problematic sexual child behavior (PSB) seems to be low. Some studies describe an influence of family-related factors like social class, finance income, maternal education or presence of a father (father figure). In our study we not only analyzed socio-economic factors and family structure but also the social life of children as well as everyday-life of the family (like media consumption, sports or meals).

Sample and method: Data of 181 children without known or suspected sexual abuse aged 5–8 years were collected in a field study in kinder gardens and primary schools. Using the CBCL (Child Behavior Checklist 4–18, Achenbach 1991) and the CSBI (Child Sexual Behavior Inventory, Friedrich 1997), the behavior of every child was rated by their parents. Specific questionnaires asked for family structure, socio-economic factors, family life, social integration and individual preferences for toys, games, TV etc. Statistical analysis used T-Tests and Chi2.

Results: Contrary to our hypothesis, neither the presence of both parents nor siblings and the position between them seem to influence the development of problematic sexual behavior (PSB). Even if the formal family-structure does not differ between children with or PSB, we found indicators for differences in the concrete realization of family life and parenting, e.g. for children with PSB one-sided parenting (mother OR father) is reported by more than 40 %. This is twice as much as for children without PSB—although the formal family-structure includes both parental figures. Further discrepancies appeared in questions about meals and chores. All in all there seems to imply a different concept of responsibility for family life between both groups.

PM-108

Spanish adaptation of the mentalization questionnaire (MZQ): psychometric properties in a sample of adolescents

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Background: Mentalization is defined as the capacity to recognize and understand the mental states (feelings, wishes, thoughts, beliefs, needs, expectations) that underpin own and others’ behaviour. The most used procedure to measure mentalization is the Fonagy’s Reflective Function Scale (RFS), which requires of several weeks to obtain a single score of mentalization from every participant. Given that more cost-efficient measures of mentalization are needed, the Mentalization Questionnaire (MZQ; Hausberg et al. 2012) was developed and became valuable for being the single available self-report instrument for measuring deficit in mentalization.

Objective: The aim of the present study is to analyze the psychometric properties of the MZQ in a Spanish population.

Method: A sample of 463 adolescents aged 12 to 19 rated the MZQ and measures of personality (Big Five Inventory), psychopathology (Beck Depression Inventory, BDI; Multidimensional Anxiety Scale for Children; MASC; Social Anxiety Scale for Adolescents, SASA; the borderline symptoms scale from the Personality Diagnostic Questionnaire-4, PDQ, and from the SCID-II), and attachment style (Relationship Questionnaire, RQ; and Relationship Style Questionnaire, RSQ). More than a half of the entire sample (249) rated again the MZQ 1 month after the first time. Results: The factor analysis showed a general factor that explains over 24 % of total variability and displayed good internal consistency (Cronbach’s $\alpha = 0.77$). The Varimax rotation did not reveal the same structure than in the original study. This could be attributed to the differences between samples. The original study was carried out with German adult participants from clinical population. The current study was developed with Spanish adolescents from general (i.e. non-clinical) population. Test-retest reliability was moderate-good ($r = 0.65$). Positive moderate correlations (between $r = 0.44$ and $r = 0.55$) with related constructs such as neuroticism, psychopathology, and insecure attachment style supported adequate convergent validity. Given that MZQ provides a measure of deficit in RF, negative correlations with measures of MZ were evidence for construct validity.

Conclusion: Overall, the current results are evidence for the validity and the reliability of the Spanish version of the MZQ, even using the instrument with non clinical adolescent population (338 words).

Keywords: Mentalization Questionnaire, Spanish adaptation, Reflective Function, Measurement, Adolescents, Non-clinical population.

PM-109

Substance use in adolescents with substance abusing parents: parent-adolescent relationship

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A relationship between parental substance abuse and subsequent substance use problems in the children has been documented extensively. Nevertheless, some theories, as PARTheory (Rohner 2002), suggests that substance use in adolescents with substance abusing parents may be attenuated by parent-adolescent relationship quality.

Purpose: To examine the association between maternal warmth (MWA) and substance use in Puerto Rican youth with substance abusing parents.

Methods: Sample: This is a secondary analysis of the Boricua Youth Study which assessed Puerto Rican youth aged 5–13 yearly for 3 years, in two different sites: San Juan (Puerto Rico) and the South Bronx (NY), $N = 2491$ (Bird et al. 2007). Youth of parents with substance abuse at any wave who, at baseline were 10 years old or older were included in these analyses ($n = 238$).

Main measures: (a) Maternal warmth (Parent report) is a 13-item adaptation of the “Hudson’s Index of Parental Attitudes” (Hudson 1982); (b) Parental Substance Abuse: Family Screening Instrument for epidemiologic studies FHE (Lish et al. 1995); (c) Child Substance Use (Parent and children report): Questions of the lifetime substance abuse section of the Diagnostic Interview Schedule for Children-IV (DISC-IV) (Shaffer et al. 2000) were used to assess youth substance use (alcohol, drugs, tobacco and marijuana) at any wave; (d) Demographic factors: Youth gender; youth age; family income; (e) Parental factors: parental psychopathology; Data Analysis: We tested the association between MWA at wave 1 and the presence of any youth substance use (alcohol, drugs, tobacco and marijuana) at any wave, using logistic regression analysis that adjusted for potential confounders (youth gender, youth age, family income, parent psychopathology and youth psychopathology).

Results: The prevalence rate of any substance use was 37.8 % ($w1-w3$). Maternal Warmth was associated with a lower probability of using any substances, even after adjusting for confounding variables ($AOR = 0.40$; 95 % $CI = 0.20-0.79$, $p 0.009$). Conclusion: In a sample of Puerto Rican youth with substance abusing parents, these results are consonant with PARTheory, which supports the relevance of maternal warmth as a protective parental factor against substance use even among children of substance abusers. Positive parenting discourages substance use in children. Considering that Puerto Rican adults have the highest rates of SU among Hispanics (Alegria 2007), early preventive interventions promoting parental warmth should be considered to reduce SU problems in this population.

PM-110

Suicide attempt in a 12 year old boy after switching 27 mg to 36 mg of OROS methylphenidate

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Objectives: Methylphenidate (MPH) is a psychostimulant medication that is mostly common used in treatment of Attention-Deficit Hyperactivity Disorder (ADHD). Side effects like irritability and agitation, related with long-acting MPH, might be the reason for suicide attempts. Studies on association of suicide attempt and long-acting MPH are relatively rare.

Methods: A 12-year-old boy with ADHD combined type, accompanied by his parents, was admitted to the pediatric emergency service because of suicide attempt with ingesting 10 long-acting MPH 36-mg tablets. The electrocardiography (ECG) parameters such as QRS duration, QT interval, R wave and PR interval were normal. except of elevated heart rate. There was no central nervous system finding except irritability and agitation. Activated charcoal administration was not carried out at the hospital because 3 h have already elapsed after ingestion of the drug at the time of admission. In his psychiatric examination his mood was agitated and irritable. He mentioned about irritability and agitation when he took the first dose of 36 mg long-acting MPH.

Results: All of his vital and laboratory findings were normal except heart rate. He had a full recovery and was discharged after 1 day of admission at the pediatric clinic and then referred to child and adolescent psychiatric department for further evaluation. There is no psychiatric history in his family.

Conclusions: Clinicians need to be alert when increasing the dosage of MPH in terms of the severe adverse effects like suicide attempts. And also it is important to inform patients’ parents and teachers regarding potential adverse effects of MPH.

1. Goldman LS et al (1998) Diagnosis and treatment of attention-deficit/hyperactivity disorder in children and adolescents. Council on Scientific Affairs, American Medical Association. *JAMA* 279(14):1100–1107
2. Klein-Schwartz W (2002) Abuse and toxicity of methylphenidate. *Curr Opin Pediatr* 14(2):219–223
3. Modi NB, Lindemulder B, Gupta SK (2000) Single- and multiple-dose pharmacokinetics of an oral once-a-day osmotic controlled-release OROS (methylphenidate HCl) formulation. *J Clin Pharmacol* 40(4):379–388
4. Challman TD, Lipsky JJ (2000) Methylphenidate: its pharmacology and uses. *Mayo Clin Proc* 75(7):711–721
5. Kimko HC, Cross JT, Abernethy DR (1999) Pharmacokinetics and clinical effectiveness of methylphenidate. *Clin Pharmacokinet* 37(6):457–470
6. Levine B, Caplan YH, Kauffman G (1986) Fatality resulting from methylphenidate overdose. *J Anal Toxicol* 10(5):209–210
7. Massello W 3rd, Carpenter DA (1999) A fatality due to the intranasal abuse of methylphenidate (Ritalin). *J Forensic Sci* 44(1):220–221
8. Scharman EJ et al (2007) Methylphenidate poisoning: an evidence-based consensus guideline for out-of-hospital management. *Clin Toxicol (Phila)* 45(7):737–752
9. Fettahoglu EC et al (2009) Oral megadose methylphenidate ingestion for suicide attempt. *Pediatr Int* 51(6):844–845

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PM-111

Suicidal behavior in Spain: a current perspective

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Introduction: Self-injury has swelled in frequency in the last few decades. Although Spain has one of the lowest rates of suicide in Europe, current trends show a global expansion, while in most countries predominate a decreasing, other maintain rates 1.

Historically older men have been considered as the group at highest risk. Nowadays studies show that suicide is the third most common cause of death in male adolescents (after road-traffic accidents and violence) and the most common cause of death in female adolescents aged 15–19 years 2.

Objectives: Analysis of the sociodemographic characteristics in our country and the manifold factors involved in this worldwide replacement.

Methods: Review of the literature on this phenomenon, applying a dimensional view.

Results: The easier availability of medication, the high rate in drugs consumption and the social transmission of the behavior could be possible factors implicated in this epidemiological change 2. In females, major depression is the more important risk factor, while in males is the previous exposure to self-harm 1. While in past precipitation and overdoses were the more prevalent methods in females, currently hanging is the leading method in both gender. It is still more

common in males (ratio 3:1). Under 12 years old, it is more common parasuicidal behaviors than suicide, which is extremely infrequent. The preferred seasons are spring and summer, specially at night time 3.

Conclusions: The increasing prevalence in pubescent of suicide attempts, must force the development of national strategies for prevention, in order to decrease the high impact outcomes.

1. Clinical Practice Guidelines in major depression in childhood and adolescents of National Health System. Ed 07/2009

2. Hawton K, Saunders KEA, O'Connor RC (2012) *Lancet* 379: 2373–2382

3. Cano F et al (2012) *Cuad Med Forense* 18(2):55–62

PM-112

Suicide attempts in adolescence: 5 years' follow-up

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Introduction: Despite the presence of a previous suicide attempt being one of the strongest predictors for future ones, there are few prospective studies characterizing the presence of continued suicidal ideation in these adolescents.

Pfeffer and colleagues, in a study conducted in 1991 on a sample of adolescents hospitalized after attempting suicide, reported that 6 years after admission, 44 % teenagers maintained suicidal ideation. However, there are no studies that identify variables associated specifically to this fact.

Compared with the general population, adolescents and young adults with previous suicide attempts have a higher prevalence of psychopathology, including depressive disorder, impulse control disorder and personality disorders.

Aims: In this study the authors proposed to carry out a 5 years follow-up to adolescents admitted to a specific suicidal behaviour consultation and hospitalization, in 2009 (n = 89).

Methods: Elaboration of a questionnaire for the systematic collection of socio-demographic and clinical data of patients, as well as the characterization of their social, family and occupational network, psychiatric history and stress factors over this period of time. To assess the presence of current suicidal ideation we applied the Beck's Ideation Scale translated and validated for the Portuguese population (BSI et al. 1979).

Discussion and conclusion: The presence of previous suicide attempts is one of the most important risk factors for future ones. However, many others appear to be related to the continued presence of suicidal ideation and the greater vulnerability of this population. Among other factors, we highlight the presence of psychopathology such as mood disorders, substance abuse and conduct disorders, social integration difficulties, low literacy, low self-esteem, family conflict and parental psychopathology.

From our preliminary analysis, the collected data in our sample seems to be consistent with the described in the literature.

Keywords: Suicidal ideation, Adolescents, Suicide attempts.

PM-113

Suicide attempts in children and adolescents: clinical factors and suicidal intent in a Tunisian sample

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Objective: The aim of the study was to determine socio-demographic and clinical characteristics of children and adolescents suicide attempters and to assess the suicidal intent score in this population.

Method: The study concerned 50 consecutives children and adolescents suicide attempters assessed immediately at the time of consultation. We examined youth who consulted emergency of the child psychiatry department of Razi hospital in Tunis, and those hospitalized in pediatric service between July 2012 and July 2013. Past psychiatric history, history of abuse, psychiatric family history, numbers of suicide attempts, and the triggering factor were examined. All participants completed the Mini International Neuropsychiatric Interview for Children and Adolescents (MINI KID) and Suicide Intent Scale (SIS).

Results: The mean age was 13.1 ± 2.0 , ranging from 7 to 16 years. The sex ratio male/female was 0.44. Drugs overdose of and ingestion of toxic substances were the most common method (80 %), more significantly in girls ($p = 0.001$). Sixty-six percent of patients had psychiatric family history. Thirty-eight percent had a history of one or more suicide attempts and 14 % had a follow up visit at the psychiatric outpatient unit. History of abuse was found in 46 % of patients. The triggering factor was noted in 62 %: family conflict (26 %), conflict with peers (12 %) and relationship break (24 %). A psychiatric disorder assessed by MINI KID was found in 94 % of the cases, with a predominance of major depressive disorder in half of the cases and adjustment disorder in one quarter of them. The intent scores were in the moderate-to-high range for 86 % of the cases, correlated with the presence of a psychiatric disorder.

Conclusion: Suicide attempts are seen in children as young as 7. Psychiatric diseases, mainly depression, as well as history of abuse, are an important risk factor of suicide attempts in youth. Psychiatric disease is associated with high suicidal intent. The screening and intensive intervention for those at risk are important to consider.

Keywords: Child, Adolescent, Suicide Attempt.

N°240

PM-114

Suicide attempts in children and adolescents: clinical factors and suicidal intent in a Tunisian sample

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Conclusion: Suicide attempts are seen in children as young as 7. Psychiatric diseases, mainly depression, as well as history of abuse, are an important risk factor of suicide attempts in youth. Psychiatric disease is associated with high suicidal intent. The screening and intensive intervention for those at risk are important to consider.

Keywords: Child, Adolescent, Suicide Attempt.

PM-115

Suicide in adolescent patients. Presentation of a case of an autolytic attempt in a teenager woman

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Abstract: The rates of suicide in 5-year-old minor children are not informed, though there exist described some cases of 3 and 4 years. According to the WHO the rate of suicide of 5–14 years old children is very low. The rates for boys place in a high range in contrast to the observed ones in girls. Approximately 2 % of the preadolescent in the general population presents an attempt of suicide.

The most used method in the attempt of suicide is the drug intoxication, being notably top the proportion in teenagers (91 %) that in children (44, 4 %).

The more frequently used drugs are analgesics, psychoactive drugs (principally tranquilizers and antidepressants) and other drug mixes.

There exist a series of factors of risk that relate to major probability of carrying out such potentially suicidal acts as the presence of other associated mental disorders (especially affective disorders), the age and the sex of the patient (masculine major lethality whereas feminine more associated to parasuicide), genetic and biological factors (changes in metabolism of serotonin, genetic polymorphism...), precedents of physical mistreatment or sexual abuse among others.

In males it is necessary to emphasize the high importance of a precedent on having developed an autolytic try previously, being considered to be this one of the more important risk factors.

As protective factors to emphasize the family cohesion and with the equal group, presence of skills of resolution of problems and strategy of confrontation, attitudes and positive values, feminine sex, religious beliefs, educational level, locus of internal control, self-esteem as well as system of support and suitable resources.

The aim is to present the case of a teen woman joined the Service of pediatric ICU after performing drug intake with autolytic purposes,

as well as to know the tackling and managing carried out by the Service of child and adolescent Psychiatry.

Keywords: Teenager, Suicide, Risk factor, Factors of prevention, Drug intoxication.

PM-116

Survey on general mental health in internet users' medical students in Shiraz University of Medical Sciences

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Introduction and objective: Internet is one of the most important resources to access the scientific literature in the medical universities and students, to reach their professional and personal goals. According to the increase of mental disorder's incidence in this group, this study is done with the purpose of evaluating general mental health in medical students of Shiraz University of Medical Sciences who use internet.

Materials and methods: In this cross-sectional study, 210 cases of medical students were randomly selected. The questionnaire of general mental health is used to collect the data. In the scores of students was divided to 2 groups, one was equal or lower than 23 and the other one was more than 23, which was indicating to healthy users for the 1st and students who was in the risk of psychiatric problems for the 2nd group. The bases of distribution of the questionnaires were internet users. The information which was gathered was evaluated with SPSS and one-way analysis variance test and independent t-test and Chi square test and $P < 0.05$ was deemed significant.

Results: 29.5 % of medical students were normal and 70.5 % were suspicious to have psychiatric problems, so the relation between the average hours of using internet with mental health was not significant. ($P > 0.05$)

Conclusion: According to the borderline data which was gathered, we cannot certainly rule out the relation between these two parameters. Due to increase in using internet between young popularity of society and relative influence of that on general mental health, it's better to control the access of internet between students by regular planning.

PM-117

Teacher's perception of benefits and barriers on school-based suicide prevention program in South Korea

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Objective: This study was to examine the school teacher's views of school-based suicide prevention programs, including curriculum-based program, staff training, nationwide screening and postventions, with a particular attention to acceptability and barriers in implementation.

Background: Suicide is the first leading cause of death among youth in Korea. Much policy effort has focused on designing and carrying out successful school-based suicide prevention programs.

Methods: We used an online survey with 582 teachers from elementary to high school across the nation, National Education Information

System of Ministry of Education. The participants completed the survey including their perception of benefit and barriers in school based suicide prevention programs. And we performed subsequent semi-structured interviews with 9 school principals exploring how differences in school organizational conditions have an influence on teachers' views.

Results: (1) Of the online survey, 34.9 % of the participants were elementary, 43.3 % were middle school, and 21.8 % were high school teachers. 67.5 % of the respondents were female, with an average age of 42 years (SD = 9.7). Their positions were regular teachers (41.4 %), followed by school nurses (15.6 %), school psychologist (15.6 %), school administrators (1.4 %) and others (25.9 %). The participants' acceptability ratings for curriculum-based program (65.6 %) was relatively greater than other programs such as screening (23.7 %), in-service training (8.4 %) and postventions (2.2 %) in the order of preference. No significant differences were found among school levels. Postvention (52.4 %) was rated as the least favorable programs in implementation, followed by screening (35.1 %), curriculum based program (6.5 %) and in-service staff training (5.5 %). Significant difference in the perception existed by school levels ($X^2 = 12.64$, $p = 0.049$).

(2) The semi-structured interviews of 9 school administrators provided further insight into gaps between ideal and real practices. It revealed that large portion of suicide prevention program was carried out by non-mental health professionals. Those teachers faced challenges for implementation: difficulties in receiving immediate counseling supports from a local mental health center for at risk students, different priorities on curriculum-based program against regular subjects, increasing work overloads, and lack of professional help. Such challenges affect the degree of success in carrying out school-based suicide prevention programs. Furthermore, they called into question whether postventions work reducing or preventing further suicide.

Conclusions: Mental health professionals and policy makers need to work out hands-on school-based suicide prevention guidelines carried out by non-mental health professionals, specifying how to cope with anticipated problems in implementation and how to best promote at-risk students in a school context.

PM-118

The assessment of characteristics of children diagnosed with reactive attachment disorder in a university hospital child psychiatry outpatient clinic within two years

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Background: Reactive attachment disorder is a clinical disorder characterized by inappropriate social behavior as a result of the disruption of the normal binding process of child's due to adverse environmental factors. Disorder occurs before the age of 5 and is associated with severe pathological care.

Methods: In this study, 137 patients admitted to Trakya University Medical Faculty, Child Psychiatry Department for 2 years, between 2012, 1 December and 2014, 1 December and diagnosed with reactive attachment disorder were determined. The patients' file information could not be obtained for 14 cases. 123 patients were included in the evaluation. 21 variables were examined. Data were obtained by retrospectively files scanning.

Results: A total of 4382 patients were admitted to our outpatient clinic for the first time and 137 of them (3.1 %) were diagnosed with reactive attachment disorder in this 2 year period. The mean age of patients in the study was 3.25 years; 97 of them were males (78.9 %), and 26 were females (21.1 %). The most common complaints of the patients was speech delay with 55.3 %, followed by the social response limitations with 22.8 % and irritability with 8.9 %. 13 % of patients were admitted for

other reasons. There was an additional chronic illness in 19.5 % of patients. When the families examined, the mean maternal age was 32 years, and the mean paternal age was 34. The mean mother's age at birth has been identified as 28. 32 % of the families (parents and in first-degree relatives) have stated that they have history of a psychopathology that will require treatment. In the first 3 years of life, 87 % of children had watched television more than 4 h a day. Before the diagnosis in our clinic, 39 % of children have experienced at least once a primary caregiver changes. Trauma or stress factors were determined as separation of the parents, loss of mother or father, family conflict, and abuse history. Trauma exposure was found in 22 % of cases. Motor retardation was found in 48 % of children by using Denver Developmental Test.

Conclusions: Watching television more than 4 h a day, primary caregiver changes, and having history of the psychopathology of parents are important findings for our cases. It is believed that the disease is rare. Descriptive studies are usually performed on high-risk groups. However, recent studies suggested that the incidence of this disease were increasing. It has emerged that further studies are needed for reactive attachment disorder.

PM-119

The bug of depression. Early onset schizophrenia

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Introduction: 15 years old who was admitted in our inpatient unit because he presented auditory hallucinations with great emotional impact; he hit himself the head because he didn't want to heard the voices, regressive attitude, he didn't want eat or drink, he changed the voice (sometimes he presented voice of a small child but sometimes the voice is in an aggressive way), social isolation, global insomnia, psychotic anguish, perplexity, blocking thoughts, he was inhibit and since a month ago, he didn't attend the institute.

With 11 years old, he had an income in our unit because of a depressive episode with psychotic symptoms and with 13 years old another one with the diagnosis of depression. As background story, he sufferer a cardiac arrest whe he had 3 days of life and he suffered psychomotor retardation. About his family, her mother had a depression with psychotic symptoms.

Objectives: Highlight the difficulties to establish the diagnosis in low prevalence diseases and, as a consequence, the delay in the establishment of an effective treatment.

Methodology: Study a clinical case of a patient with an early case of psychosis.

Results: The schizophrenia with childhood and adolescent onset is defines as a severe form of schizophrenia which starts before the 13 years old. The prevalence is less than 0.2 %, with a double proportion of boys than girls. The most characteristic positive symptoms are delusions, hallucinations alterations of the speech and thought, and psychomotor behavioral alterations.

About the negative symptoms, we can find blunted emotions, abulia, social isolation and disorganized speech. The onset could be insidious or with negative symptoms whose conceal the positive.

The differential diagnosis is made with psychiatric and medical diseases.

Early onset schizophrenia is more severe and refractory to treatment and with a worse prognosis. The best predictors of the course of the disease are the prior level of functioning of the child. It is recommended a multidisciplinary approach, including psychoeducation

PM-120 The Burden of families of children with bipolar disorders

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Background: Bipolar disorders (BD) can have a severe impact on the child's family and affect caregivers' own ability to parenting, to engage in effective problem-solving and handle clinical needs of their children and that predicts adverse clinical outcomes. Limitations of exclusively pharmacological interventions to treat multiple mental health needs of children with BD from developmental, social functioning and long-term outcomes perspective lead to discussions on effective multimodal approaches and psychosocial treatments addressing advanced well-being of these children. Furthermore clinicians often underestimate influence and consequences of family burden and parents may feel isolated, restricted from pursuing their own activities, and may be overwhelmed by a lack of support from treatment providers. This survey is aimed at assessing burden of families with children with BD.

Methods: Parents of 72 children (10–17 years) diagnosed with BD (based on DSM-IV criteria) with at least one mood event in the preceding 12 months were recruited into this study conducted in Moscow research institute of psychiatry. All patients are treated in concordance with evidence-based guidelines. Caregiver Strain Questionnaire (CGSQ), Experience of Caregiving Inventory (ECI) scales were used to identify level and main domains associated with family burden.

Results: At baseline assessment regardless of the BD subtype, phases of illness, severity of the patients' illness state caregivers (who in this study were primarily mothers) experienced high levels of family burden and families with caregivers themselves suffering from bipolar spectrum disorders experienced higher levels of family burden. 90 % of caregivers reported moderate or great distress in at least 1 burden domain. The most severe distress was noted in subjective burden domain (4.95 according to CGSQ).

Conclusions: Family burden is currently one of the key factors in managing children with BD which is contributory to increasing parents' competence that is essential for improving quality of life and positive developmental outcomes. It would behoove professionals to become more sensitive to the distress of family members and to consider helping them as well as the identified patient. Assigned alleviate family burden program can result in reduced caregiver burden and this sort of family intervention seems to be embedded within a treatment program proved to be highly acceptable and effective in meeting the caregiving needs of relatives of children with BD in order to stay well as participants of psychosocial rehabilitation process.

PM-121 The challenge for the categorical diagnosis of motor stereotypies in pre-scholar children

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Introduction: Motor stereotypies are repetitive, seemingly driven, and non-functional motor behaviours, but their clinical presentation

can vary from more simple movements to more complex presentations. The degree of psychosocial impairment caused by the stereotypies is extremely varying up to pervasive patterns.

Complex stereotypies are subdivided into a "primary" category, indicating its presence in an otherwise developmentally normal child, and "secondary" for those children with autistic spectrum disorders (ASD), developmental delays, sensory impairment, or a variety of syndromes. Thus, the assessment of motor stereotypies must encompass not only a thoroughly neurological evaluation, but also a psychiatric and psychosocial screening. Sometimes in clinical practice, however, it's difficult to draw a firm line between primary and secondary stereotypies.

Methods: We report on 12 pre-scholar children (age range: 29–72 months; 1 girl) referred to our Department for the presence of motor complex stereotypies. All children had a normal cognitive level (IQ > 70). According to their age, they received a neurological, behavioural and psychiatric evaluation with standardized questionnaires and tests, including the Motor Severity Stereotypy Scale (MSSS), the Developmental Coordination Questionnaire (DCQ), the Repetitive Behaviour Scale-Revised (RBS-R), the Social Responsiveness Scale - 2—Parent (SRS-2-P) and the Autism Diagnostic Observation Schedule (ADOS).

Results: In all children the beginning of motor stereotypies was reported before the age of 3 years (range 3–36 months). A slight delay in achieving motor skills (walk alone: mean = 15.7 months—in 3 cases between 18 and 22 months) was also reported.

At the evaluation, the severity of motor stereotypies, as measured with the MSSS, varied from 5 to 41 (mean: 24.7).

Neurological evaluation and/or DCQ suggested clumsiness in 8 out of 12 children.

The RBS-R displayed the presence of other restrict interests or rituals in 6 children.

The SRS-2-P showed problems in the area of social communication in 4 children (T score >60).

Finally, 7 out of 12 children obtained at ADOS scores suggestive for an ASD risk ranging from minimal to moderate; the relative weight of sub-items regarding the stereotypies, however, was high and accounted for the pathological scores in 3 of these 7 subjects.

Conclusions: Complex stereotypies in pre-scholar children with normal cognitive level represent a challenging diagnostic issue for which a finely nuanced assessment is mandatory. Notably, a careful and cautious use of standardized tests is warranted to avoid misdiagnosis. The apparent relationship between stereotypies and derangement of motor development confirms previous observations and claims further studies.

PM-122 The distorted development of attention: the possible overarching reason for ADHD and ASD

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Recent research has indicated that inadequate social behaviours in children with ADHD may be phenomenologically and etiologically related to autism spectrum disorders (ASD). We hypothesized that the social dysfunction of children with ADHD and ASD may be related to a similar cognitive profile in both groups. The study groups (selected among patients of Child and Adolescent Psychiatry Unit) comprised 90 children (90.0 % male, 10.0 % female) with severe Combined ADHD subtype (n = 54) and with Level 1 of ASD (n = 36), aged between 6 and 12 years (median 9.6 years; SD 1.98). The diagnosis of

Combined ADHD subtype and ASD were ascertained using current DSM-V (APA 2013) criteria.

ADHD symptoms in children from both groups were measured using the NICHQ Vanderbilt Assessment Scale for Parent (VADPRS) and for Teacher (VADTRS), each of which being divided into two sections: Symptoms and Performance. All study participants were administered the Wechsler Intelligence Scale for Children—Revised (WISC-R). The mean value for all intelligence scales was 100 and the standard deviation 15. All statistical analyses were performed using the Statistica 10.0 PL (StatSoft). The results of our study indicate that common dysfunctional behaviours for the two groups included poor organizational skills, problematic relationship with peers, action without regard for consequences, difficulty in compliance with ruling. Symptoms of ADHD were observed in 22 % children with ASD. Total scores of WISC-R were similar for the phenotype of ADHD (mean \pm SD: 99.9 \pm 15.8) and ASD (mean \pm SD: 101.7 \pm 15.7). Significant differences ($p < 0.025$) were noted between the average values of the Coding-Digit Symbol in the study groups (mean \pm SD: 8.74 \pm 3.49 for children with ADHD and mean \pm SD: 11.14 \pm 3.28 for participants with ASD). We found a significant negative correlation ($R_s = -0.37$; $p = 0.003$) between inattention domain and the Comprehension subtest, which can shape account for social intelligence. It has been proved that attention deficit is the most disturbing factor in social functioning of children. Symptoms of inattention hinder to establish social relationships through observation and focus on the social factors that are essential for supporting interaction.

Among other possibilities, the pathologies at “opposite ends of the scale of attention shift—ability in the time dimension” may lead to various manifestations of clinical phenotypes (difficulty keeping attention in ADHD or inability to detach attention in ASD), but further studies are required to clarify this hypothesis.

PM-123

The effect of sexual abuse on posttraumatic psychiatric symptoms in children and adolescents with sexual abuse

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Purpose: The purpose of this study is to examine the effects of the characteristics of victim and sexual abuse on the posttraumatic psychiatric symptoms in the children and adolescents with sexual abuse.

Materials and methods: 137 children and adolescents were recruited by Seoul Sunflower Children Center, a nation-funded sexual violence victim protection center, from January 2009 to December 2013. We collected the demographic data of the victims and the Trauma Symptom Checklist for Children (TSCC) from victims. We hypothesized victims' age, sex and IQ, and the characteristics of sexual abuse as the affecting factors of posttraumatic psychiatric symptoms. Descriptive analysis and hierarchical regression analysis were done for analyzing demographic data, TSCC scores, and psychiatric symptoms.

Results: The victims' age and the characteristics of sexual abuse were significantly related to the traumatic distress of sexual abuse. R-square was 23 % for anxiety, 39 % for depression, 21 % for posttraumatic stress, and 37 % for dissociation on TSCC.

Conclusion: This study suggests that significant affecting factors on posttraumatic psychiatric symptoms are victims' age, and type, frequency and duration of exposure and disclosure of sexual abuse in children and adolescents. We need to explore any psychiatric symptoms other than posttraumatic symptoms, and relations between

pretraumatic and posttraumatic psychiatric symptoms through collecting larger samples.

Keyword: Effect of sexual abuse, Child and adolescent, Psychiatric symptoms.

PM-124

The effects of stimulant medication on combined and inattentive ADHD subtypes: a longitudinal MRI study before and after pharmacological treatment

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Introduction: Attention-Deficit/Hyperactivity Disorder (ADHD) is a psychiatric disorder characterized by age-inappropriate frequency of inattentive and/or hyperactive-impulsive behavior(s). Most common and effective pharmacological interventions for the treatment of ADHD are stimulants such as methylphenidate (MPH) and amphetamine (AMP) compounds. The therapeutic effects of stimulants are likely mediated by increases in activity of dopamine and norepinephrine in fronto-striatal circuitry, with downstream effects throughout the brain. However, much remains unknown about the manifestation of such neurochemical effects in structural brain development. Our study aims to provide specific biomarkers and clinically relevant characteristics that might help indicate the neurobiological substrate related with pharmacological responses.

Methods: MRI data sets were acquired for 15 combined ADHD subtype, 18 inattentive ADHD subtype and 15 controls at baseline and after stimulant treatment. A voxel based morphometric study was performed to determine grey matter volume (GMV) differences and medication related anatomical changes on each subtype. GMV measures were performed using SPM8. VBM analyses were performed using a paired-t-test design, comparing baseline and follow up scans ($p < 0.05$, FWE-corrected). ROI (region of interest) analyses were also performed.

Results: Increased GMV was observed in the combined subtype group in the right middle temporal gyrus and the supplementary motor area after treatment. In addition, this group showed decreased GMV in the right preuneus and the precentral gyrus. We found decreased GMV in the left middle temporal gyrus and in the right inferior temporal gyrus in the inattentive group after medication and GMV increases in the right cerebellum in this group after treatment. The controls did not show GMV differences between pre and post scans. Finally, ROI analyses indicated decreased GMV after pharmacological treatment in the left caudate and the left pallidum in the combined group. No significant differences were observed in the other groups.

Conclusions: The normalization effects of methylphenidate on the developing brain might be highly specific and may depend on numerous factors, such as genetic predispositions, subject-related factors (age) and symptom severity. Our results indicate that the normalizing effects of stimulant drugs might develop in a different, specific, pattern for each ADHD subtype. This suggests that the ADHD subtype might represent another factor related to medication outcome.

Limitations: Relatively small sample size. We were not able to recruit all subjects for the follow up.

Funding: Instituto de Salud Carlos III and La Marató de TV3.

Keywords: ADHD, MRI, Stimulant treatment.

PM-125**The sociodemographic and clinical features of children with obsessive compulsive disorder in a university hospital in Turkey**

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Objective: We aimed to explore the socio demographic and clinical features of children with obsessive-compulsive disorder in a university hospital to contribute to the child and adolescent psychiatry literature.

Background: Obsessive-compulsive disorder (OCD) is a time consuming and chronic disorder characterized by obsessions and compulsions that can start before 18 years of age and can be associated with significant impairments in academic, social and family functioning.

Methods: We have retrospectively assessed the sociodemographic and clinical features by investigating the files of children and adolescents who were diagnosed primarily as OCD according to DSM-IV-TR, at the out patient clinic of the Child and Adolescent Psychiatry Department of Mersin University, School of Medicine, between 2000–2009.

Results: 188 (42.7 %) of 440 cases in our study were determined to be girls, while 252 (57.3 %) boys; the mean age was 11.08 ± 3.363 years and 70.2 % of the cases were at elementary or secondary school, 19.1 % at high school, 23.9 % of the cases had no comorbid disorder, 49.5 % of the cases had one comorbid disorder, 26.6 % of the cases had two comorbid disorders. Attention deficit hyperactivity disorder (26.8 %), generalized anxiety disorder (16.6 %) and tic disorders (10.2 %) have been found to be the most common comorbidities among our cases. Cleaning and contamination obsessions (48.9 %), cleaning and washing compulsions (32 %) have been found to be the most common obsessions and compulsions. The children's depression inventory scores, trait children's anxiety inventory scores, Maudsley obsessive compulsive questionnaires scores have been found to be positively and significantly correlated with each other.

Conclusions: In our opinion, intensive efforts should be made to establish a global consensus regarding a standard assessment pack age for early on set OCD, morecross-culturally valid versions of instruments to be able to compare the studies specifically aimed at assessing the sociodemographic, clinical and prognostic aspects of OCD across different countries.

Keywords: Obsessive compulsive disorder, Children, Sociodemographicfeatures.

PM-126**The Spanish version of the Behavioural Inhibition Scale (BIS): psychometric properties in a sample of adolescents**

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Background: The Behavioural Inhibition Scale (BIS) is a brief instrument for measuring behavioural inhibition (BI) that has

demonstrated good psychometric properties in a sample of children aged 7 to 12 years old (i.e., Cronbach's Alpha between 0.88 and 0.95; test-retest correlation of $r = 0.77$ over 2-year period; adequate correlations with temperamental measures). The BIS consists of 4 items that children and parents rate in 4-point Lickert's scales, and a fifth categorical item with which the informants classify the child condition in highly inhibited, uninhibited or medium.

Objective: The aim of the present study is to provide evidence for the psychometric properties of the BIS in a Spanish sample of adolescents.

Method: A sample of 463 aged 12–19 years old adolescents and their parents rated the BIS along with different measures of BI, personality and psychopathology. A third of the sample ($n = 168$) rated again the BIS two months later.

Results: Both the adolescents and parents versions of the BIS show one-factor structure which explains the 61 and 67 % of the total variability, respectively, and shows good internal consistency (Cronbach's Alpha of 0.78 and 0.83, respectively). Test-retest correlations ranged from 0.46 to 0.63 for the items, and 0.67 for the total score support the test-retest reliability. Test-retest Kappa = 0.43 supports test-retest reliability also for the categorical item. Moderate correlations ranged 0.3 to 0.7 with related measures (i.e., extraversion, social anxiety), as well as with other measures of BI are evidence for the construct and convergent validity of the BIS. Analysis of variance reveals that adolescents classified as inhibited, medium or uninhibited on the basis of the categorical item significantly differed on the level of behavioural inhibition, according to different measures, as well as on extraversion and social anxiety.

Conclusion: The current study provides evidence for the reliability and validity of the BIS items for measuring BI in adolescents, both for the self-report and for the parent's version (315 words).

Keywords: Behavioural Inhibition, Assessment, Psychometric properties Adolescents, Parents.

PM-127**The use of haloperidol with cognitive behavioral therapy treatment in 15 years old adolescent patient with internet gaming disorder**

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Internet is very necessary to reach knowledge and communicate with people but the excessive usage of internet video games, social communication, gambling, shopping and also pornographic websites have become a big problem for adolescents.

Online and offline video games, that are very popular especially with adolescents and young adults, have been used as an entertainment, enthusiasm, competition seeking, emotional coping and escaping from reality. Especially video games that can be played by a lot of people at the same time and people can act as a different characters in them, are very popular with people. Internet gaming disorder is the only internet addiction category which has been accepted as a psychiatric disorder until now. It has become a disorder in DSM-V. Recent studies have shown that male gender, being in depression, low self esteem and weak family relationship have been accepted as risk factors of internet gaming addiction. The prevalence of internet gaming addiction is 0.6–1.0 % in general population and 3–13 % among young adults and adolescents in recent studies. Low school success, destroyed daily life and weak human relationships are common risks for adolescents with internet gaming addiction. Although psychostimulants, atomoxetine, antidepressants and cognitive behavioral therapy have been used for treatment of internet gaming disorder, recent case reports have shown that antipsychotics

with antidepressants or opiate receptor antagonists with antidepressants are also successful.

Our case is a 15 years old male who sits on a computer 14 h a day. Therefore he hasn't gone to school for a while, has a damaged self care, eats at the computer, doesn't go outside and doesn't sleep regularly. He also shows withdrawal and excessive aggression symptoms when he isn't able to use computer.

Although long and short acting methylphenidate, atomoxetine, risperidone, aripiprazole treatments have been given to our patient at different times in recent 5 years, the time that he spends on the computer a day has been gradually getting longer and derealization symptoms have been added to his complaints. So we planned haloperidol with cognitive behavioral therapy treatment for the patient. Two weeks after haloperidol and cognitive behavioral therapy treatment was started, we found a dramatical recovery in our patients complaints.

With the assessment of this case who has internet gaming disorder, we concluded that using antipsychotics with cognitive behavioral therapy treatment in internet gaming disorder is effective.

PM-128 The uses and abuses of facebook by adolescents with ADHD

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Background: In the last decade, the internet usage has become an irreplaceable part of life. It has taken a different dimension after the social networking sites (SNSs). Adolescents can affiliate to social networks in order to make new friends, find romantic partners, play game or exchange information in real life. Also adolescents with ADHD(attention- deficit/hyperactivity disorder) already experience difficulties in planning and organization, the process that starts with membership then turns into a new form of addiction. The aim of this study were to examine whether male adolescents with ADHD are at increased risk of facebook addiction and to assess the personal risk factors, comparing the variables between the genders.

Method: We examined the rates and correlates of facebook addiction and ADHD symptoms including impulsivity in a sample of adolescents, (ADHD; n = 60, 30 girls, 30 boys). Bergen Facebook Addiction Scale, Conners Wells Adolescent Self Report Scale, Barratt Impulsiveness Scale and Sociodemographic Information Form were used for evaluation.

Results: The mean age of boys and girls are 15.0 ± 1.01 , 15.06 ± 1.01 , respectively. Boys reported longer time facebook usage ($p = 0.000$) and having more virtual facebook account than girls ($p = 0.001$). Passing time, relationship maintenance, and having fun were the most common using motivations both in girls and boys. Using facebook for games, relaxing and status updating were higher in girls when sharing photo/video were higher in boys.

As predicted, there were significantly higher rates of facebook addiction symptoms including salience ($p = 0.05$), tolerance ($p = 0.006$) and withdrawal ($p = 0.04$) in boys with ADHD, while there were any significant difference in Conners subscales.

The variable for both boys and girls were investigated using visual and analytical methods to determine whether or not they are normally distributed. The parameters affecting salience, tolerance and withdrawal were investigated using Spearman/Pearson correlation and Student's t-test, where appropriate. There were significant correlations between higher Barratt Impulsiveness Scale scores and symptoms of Facebook addiction including salience, tolerance and withdrawal.

Conclusion: The results of this study suggest that Facebook addiction is associated with being male and having more impulsiveness. Researchers have recognised that the main uses and gratifications of Facebook are relationship maintenance, passing time, entertainment and companionship. But this study reveals that there are some differences in a clinical adolescent sample and genders. Researchers in this area should also aim to conduct detailed exploratory studies of Facebook addiction in adolescents.

Keywords: ADHD, Adolescence, Facebook Addiction.

PM-129 Theory of mind in children with autism spectrum disorders and attention deficit hyperactivity disorder: is social dysfunctioning common to both disorders?

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Introduction and aim: Autism spectrum disorders (ASD) and attention deficit hyperactivity disorder (ADHD) are both associated with problems in social interactions. However, so far only few studies addressed the issue of social cognition deficits in ADHD. Children with ASD are reported to present greater difficulties in the Theory of Mind (ToM) tasks compared to children with ADHD, and a primary deficit in social orientation. However, some studies have shown that ToM may play an important role in the impairments in social cognition and peer relationship in children with ADHD, especially children showing hyperactive behaviour.

The authors aim to study ASD and ADHD children capacities to understand (decode?) causal relationships and others mental states and clarify differences regarding these abilities between the two neurodevelopmental disorders.

Materials and methods: We compared a sample of ADHD children and a sample of ASD children without developmental delay. ADHD was diagnosed by a child psychiatrist according to DSM-IV-TR criteria for this disorder and ADHD children were divided in subgroups, according to the type of symptoms in inattentive type, hyperactive type or combined type. ASD children were diagnosed by a child psychiatrist and fulfil score for ASD in ADOS-2 and ADI-R scales. Clinical and social demographic data were collected from the clinical file as well as methylphenidate or other medication at assessment time. All the children completed the Simon Baron-Cohen's picture sequencing stories test. According to the test protocol children were asked to arrange the picture cards in the correct sequence and tell the story and the stories told were analysed. Data were analysed using the Statistical package for Social Sciences, Windows version 21.0.

Results and main conclusions: When the sequences could be understood in terms of causal-mechanical or simply descriptive behavioural criteria, ASD children shown equal or better performance compared to ADHD group.

The ASD children presented greater difficulty in the sequences that evoked understanding in terms of intentional actions and lack of mental state language to describe the picture sequences. ToM deficits showed by ASD children appear to be especially linked to difficulties in understanding figurative language, beyond the influence of intelligence and executive functions. The mechanisms involved in these associations should be investigated in the future designs.

PM-130 Trichotillomania and comorbidity in adolescents: two case reports

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Trichotillomania (TTM) is a relatively rare disorder. In recent editions of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V, 2013), TTM is classified in the group including obsessive-compulsive and related disorders. TTM also has some characteristics of the disorders of impulses and habits. Initially, TTM symptoms usually occur during adolescence. The clinical picture in children and adolescents is often complicated by the presence of comorbidity. In children and adolescents, the most common comorbidity is in the domain of affect, specifically depression and anxiety. Rarely described comorbidities are tics, hyperkinetic disorder, obsessive-compulsive disorder, various forms of regressive behavior, and some others. In the two cases reported, recognizing TTM was impeded. Specifically, children and adolescents reluctantly acknowledge TTM, so recognizing and further treatment was in many ways multidisciplinary and depended on the comorbidity. In the first case, the etiopathogenesis is mostly emotional. In the second case, the associated disorder is from the group of neurodevelopmental disorders. The choice of psychotherapeutic techniques and broader approach to the treatment entirely depended on the comorbidity and also required cooperation of experts from other areas of pediatric medicine. We believe that research should persistently be focused on discovering direct and other relationships of TTM and comorbidity in order to allow for the most appropriate and effective recognizing and treatment of this disorder.

Keywords: Adolescent; Comorbidity; Trichotillomania.

PM-131 Trichotillomania in infants

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Introduction: Trichotillomania or compulsive hair pulling is a disorder that causes people to repetitively pull out the hair from body parts (i.e. scalp, eyelashes, eyebrows) with non-cosmetic intent, resulting in noticeable hair loss or alopecia. It typically onsets in childhood between 9 and 13 years old, and presents comorbid with anxiety, depressive or internalizing disorders. Although trichotillomania has recently been included within the obsessive-compulsive disorder and related disorders' group in DSM-5, hair pulling in infants may be regarded as a habit disorder that has a heterogeneous aetiology. This poster aims to emphasize the specific aspects of assessment and management of this condition in children under-5 years of age, whose presentation is rarer and less researched.

Method: Based on a case series of consecutive referrals of under-5 s presenting with hair pulling behavior at Child and Adolescent Mental Health Services (London, UK) in 2014, the poster will illustrate the main aspects of mental health assessment and management of trichotillomania in infants, including differential diagnosis, medical investigations, comprehensive psychiatric assessment, questionnaires, and state of the art on evidence-based treatments.

Results: Before a diagnosis of trichotillomania can be made in under-5 s, differential diagnosis requires ruling out dermatological or medical conditions presenting with alopecia. A comprehensive mental health assessment should explore changes in routine, anxiety/distress, psychological or physical trauma or neglect, as well as family relationships. Comorbid conditions (i.e. anxiety, mood and language disorders) as well as family history of psychiatric comorbidity need to be considered. There is lack of evidence-based treatments in this age group, but the most plausible approach is a functional analysis, followed by behavior modification programs and a family systemic approach.

Conclusions: Persistent trichotillomania may result in a source of frustration and hopelessness for parents or carers of under-5 s. It is key for mental health clinicians to be aware of this condition to recognize the signs of trichotillomania, refer for required medical investigations, and to be able to provide appropriate assessment and management for this condition. Psychoeducation and intervention programs need to be provided within the developmental context of infancy.

Keywords: Trichotillomania, Infants, Comorbidity, Assessment, Treatment.

PM-132 Validation of neurological soft sign's scale in children to search for endophenotypes in autism spectrum disorders

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Background: Neurological soft signs (NSS) represent endo phenotypic markers in pervasive developmental disorders (PDD) in children. Their determination allows better characterizing PDD and getting more homogeneous subtypes in order to facilitate genetic research. Few scales assessing exhaustively NSS have been adapted and validated in children including children with PDD, hence the interest of our work which consisted in an adaptation to the child of NSS scale and the realization of a validation study in general and clinical population.

Methods: We have chosen Krebs and al's NSS scale validated in adults. After a preliminary study that examined 42 children, a certain number of changes have been made to the original scale to enable its adaptation to the child and to facilitate its handiness particularly in the children with PDD. Then we conducted a validation study by examining the psychometric properties of this scale in a population of 86 children (26 children with PDD and 60 typically developing children).

Results: Adaptation of the scale consisted of a modification of the order of items, the use of concrete supports for the assessment of laterality, the elimination of item constructive praxis. The internal consistency was good with a Chronbach alpha of 0.87. Inter-rater reliability was good, kappa coefficient was greater than 0.75 for 16 items, 3 items had a kappa value between 0.74 and 0.60, only 1 item had a kappa coefficient between 0.4 and 0.59. Good inter-rater reliability was also verified for the total score with a value of intra-class correlation coefficient (ICC) of 0.91. Principal component analysis found five factors accounting for 62.96 % of the total variance. Evaluation of NSS showed significant differences between patients with PDD and control for the total score of NSS ($p = 0.000$) and also in different subscores.

Conclusion: The scale that we adapted proved to be valid for the evaluation of SNM in children, especially in children with PDD.

PM-133 Vocal chord nodules and psychopathology in children

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Objective: To examine the association between vocal fold nodules and DSM-IV defined psychiatric disorders, including depression, anxiety disorders, conduct disorder, oppositional defiant disorder, attention-deficit hyperactivity disorder, and mental disorders, in children referred to odiology dept of İstanbul University.

Method: 25 children aged 7 to 10 years referred to odiology center in İstanbul University were evaluated using K-SADS for psychopathology and mental development status was evaluated with Wisc-R and compared to random control group of patients age and sex matched. All children underwent perceptual evaluation of their voice, followed by an acoustic analysis.

Result: The children with vocal fold nodules showed mostly %45 ADHD, %45 agoraphobia (past & present) 20 % present separation anxiety and normal mental development.

Conclusions: Vocal chord nodules are the most common laryngeal pathology observed in primary schools. In our study we aimed to find out the psychopathologies of children with voice disorders especially with vocal chord nodules. Children with ADHD were perceived to have significantly more hoarseness, breathiness, and straining in their voice. Children with ADHD may abuse their voice and as a result we have a high percentage vocal chord nodules. Also the children suffering from separation anxiety may abuse their voice in means of crying, shouting and temper tantrums. As a result we can conclude that early detection of vocal disorders and the underlying psychopathology is very important to plan the multidisciplinary therapy.

PM-134 Who attends child and adolescent psychiatry emergency service in Lisboa, Portugal?

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Objectives: Children and adolescents have been increasingly accessing mental health services in Portugal. In the Emergency Service (ES), not only this increase of frequency has been registered but also the severity of the cases is felt. However, this has not been clearly evaluated in the last years. Therefore, our goal is to characterize the population attending the paediatric emergency department who required mental health assistance in 2013 and its pattern of access.

Methods: Literature review. Variables selection (demographic characterization, current mental health assistance, motif, previous access to CAP ES, intervention). Data collection from the ES software system (HCIS®), which was then crosschecked with the CAP ES registration paper forms. The data was statistically processed (SPSS®), with descriptive analysis of the data and variable correlation.

Results: Our results show a higher prevalence of adolescents attending the emergency department, predominantly aged over 15 years old, females, with behavioural and mood symptoms and self-aggression episodes. Monthly variability was observed, with bigger affluence in May, October and November. Close to 15 % had criteria for hospitalization, although only 70.8 % of this group was effectively hospitalized. In 11.3 % of the cases, it was at least the third recurrence to the emergency service.

Conclusions: Our results lead us to conclude that there is an increased number of youngsters attending ES for mental health care. Due to its prevalence, older adolescents with severe pathologies are the focus of our concern. Further study is needed in order to understand its causes, consequences and need for change towards the improvement of child and adolescent mental health.

PM-135 Working with children with developmental disorders

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There are many different approaches to developmental disorders in the field of child psychiatry and also controversial research findings on etiology, contributing factors and interventions.

The study presents the interdisciplinary team working on developmental disorders in order to share our experience with other teams or professionals. This work is organized in the context of all the previous years practice in the child guidance center which provides primary and secondary mental health care for children and adolescents. The assessment at preschool age is important given the possibility of an early intervention with the aim of prevention of serious outcomes for the children's health.

The service is for children aged 2–5 years old with developmental disorders, specifically with autistic spectrum disorders and developmental delays. There are also referrals of children presenting other problems (speech disorders, behavioral problems etc.) with evidence that their symptoms may be part of a developmental disorder. During 2013–2014, 128 children were examined and followed up every 6 or 12 months.

After initial reception and history intake by the nurse, the procedure is carried on with a detailed history and assessment by a child psychiatrist, speech and occupational therapist assessments and also psychological and special educational assessment when needed.

In the consultation and follow-up sessions we discuss with parents about the diagnosis, guidelines, therapeutic possibilities and the child's progress, providing also a written report. Given the importance of early intervention but at the same time the dynamic of child development, emphasis is put on not predetermining the future outcomes. We discuss all the child's strengths and difficulties and the parents'/family's contribution in the context of the interaction and relationship with the child. Speech and occupational therapy are provided depending on staff availability to children of vulnerable and poor families.

There is also collaboration with kindergarten and nursery schools, public agencies, social workers, community organizations and other therapists in order to share information about the child and to coordinate our interventions.

There are many challenges to confront in a financial crisis period, like children's limited access to health care and education with adverse effects on the developmental and psychiatric disorders' course.

We emphasize on the importance of supporting the unmet mental health needs of children in an effective and clinically meaningful manner and promoting the children's optimal development.

Keywords: Developmental disorders, Children's mental health care.

TUESDAY POSTERS

PT-001

22Q11.2 Deletion syndrome: the neuropsychiatric phenotype (in a Portuguese clinical sample)

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Introduction: 22q11.2 Deletion Syndrome (22q11.2 DS) is the most common microdeletion syndrome, with an estimated prevalence of 1 in 4000 live births. However, the actual occurrence may be higher because of variable expressivity. In fact, prevalent studies lead to different results, ranging 1/3900-1/9700 live births.

22q11.2 DS is the second most frequent cause of development delays (2.4 % of development delay cases) and major cardiac disease (10–15 % Fallot tetralogy cases), following down syndrome.

Over 93 % of cases occur de novo, while the remain 7 % have autosomal dominant inheritance.

The phenotypic spectrum is extremely wide, including over 180 possible congenital anomalies, learning disability and psychiatric symptoms.

Give the variable expressivity, the diagnosis can not be made, specially in the absence of the following classic findings: deficits in development, learning disabilities, or both; behavior problems, psychiatric, or both; palate defects; characteristic facial aspect; conotruncal cardiac anomalies; nasal regurgitation or nasal speech; immunodeficiency (thymic hypoplasia/aplasia); hypocalcemia (parathyroid dysfunction).

Previous research focus the neurobehavioral phenotype of 22q11.2 DS, considered a neurodevelopmental genetic disorder. Developmental delays and learning disabilities are common, with expressive language and motor delay, hypotonia. Over 60 % develop treatable psychiatry disorders in adulthood. The most common include Attention Deficit and Hyperactivity Disorder (ADHD), Schizophrenia (0–38 %) Oppositional Defiant Disorder, Anxiety Disorder, Autism Spectrum Disorder, Obsessive-Compulsive Disorder and Major Depressive Disorder. Research focus on higher risk of psychosis episodes in late adolescence and early adulthood, and neuropsychiatric symptoms in early childhood as premorbid signs of future psychotic events.

The aims of the present study are to evaluate the neuropsychiatric phenotype in 22q11.2 DS patients in Medical Genetic Department of Oporto Medical Centre, Portugal.

Methods: Medical records of patients which 22q11.2 DS diagnose was made in the last 2 years have been analysed through a structured data sheet including the associated cognitive status, neurobehavioral features and psychiatric morbidity.

Results: The sample is on recruitment, so the results are to determine.

Conclusions: The authors expect a preponderance of development and cognitive delays, without severe mental delay, and a higher prevalence of some psychiatric conditions as ADHD in early ages, and psychotic events in late adolescence and early adulthood. The authors hope that this findings help the clinicians in the therapeutic management of patients with that syndrome, particularly psychiatric and psychological approach and pedagogic support.

PT-002

A comparison between the childcare policies of the sure start children's centres, United Kingdom, and dream start, South Korea

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Global efforts are underway to expand opportunities for the social advancement of women and encourage childbirth, as manifested by the implementation of governmental childcare policies. Although the Republic of Korea (ROK) introduced a free infant care policy in 2013, it encountered challenges, such as budget shortfalls, inequality based on socioeconomic status, and a negative impact on infants' development.

In this study, we explore the breakthrough by comparing the free infant care policies implemented in the form of Dream Start (DS) in the ROK that was preceded by the similar Sure Start Children's Centres (SSCC) in the United Kingdom (UK).

Our study involved a comparative analysis based on the reports "Best Practice for a Sure Start: The Way Forward for Children's Centres", which was published in the UK in 2013 and "2014 Dream Start Business Information", which was published in the ROK in 2014.

In the case of the UK, the reference of the subject is clear, namely to support those children and families who, in terms of economic status, form the lower 20 % of the layer constituting the lower 30 % of the region .

However, in the case of the ROK, policy management is non-integrated and the budget is distributed uniformly without regional differences based on economic status. Additionally, there is a difference in the way the center is staffed in Korea.

The system in the UK is stable and capable of continuous service management. In contrast, the service that is provided in the ROK is limited by the hiring of non-major contract workers.

The shortage of collaboration with local programs in the ROK causes more than 50 percent of those utilizing the service to be elementary school children, rather than infants.

The purpose of the DS program is to support integrated services for children from vulnerable social and family environments, to ensure they are provided with the opportunity of a fair start. However, the limitation of age-specific programs is that children of an early school age, rather than infants, are receiving more support. In addition, support is not provided in accordance with the economic status of the family.

DS is one of the implementations of the infant care policy that is provided free of charge. Further research and evaluation is required, because the impacts of both the short-term and long-term development of children participating in these programs need to be determined.

PT-003

A latent variable approach to executive function in pediatric obsessive-compulsive disorder (OCD)

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Background: OCD is a heterogeneous and highly debilitating disorder with frequent onset in childhood. Previous research in adult samples point to executive function (EF) difficulties as a potential core marker of the disorder. EFs are higher order cognitive functions directing goal oriented behaviour. Differences in EF performance may differentiate symptom subgroups and treatment response patterns in OCD. However, adult patients are characterized by having longer duration of illness and a previous treatment history which may influence the development of EF difficulties. Moreover, studies tend to employ broad and mixed test batteries. Little research has been carried out in drug naïve child and adolescent OCD samples and test batteries designed to tap more “pure” EFs by means of looking at latent structures across test results have not previously been applied in this field.

Objective: The primary objective of this study was to investigate baseline EF in clinical vs non-clinical children and adolescents at a group level applying a latent variable approach.

Method: The study was an add-on to the Nordic Long-term OCD Treatment Study using a case-control design. The present study included 54 children and adolescents 7–17 years old diagnosed with OCD and 54 typically developing children matched for sex and age (± 50 days) recruited from demographically representative local schools. Before entering into the study participants were screened and diagnosed using a comprehensive battery of diagnostic and rating based instruments and assessed with a comprehensive neuropsychological battery of EF performance tests prior to entering a cognitive behaviour therapy programme.

Results: In the poster presentation results from baseline comparisons of EF between OCD and typically developing children and adolescents will be presented and discussed.

PT-004

A nine year old girl with phelan mc dermid syndrome, who had been diagnosed with autism spectrum disorder

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Introduction: The 22q13.3 deletion syndrome, also known as Phelan Mc Dermid Syndrome, is a contiguous gene disorder resulting from deletion of the distal long arm of chromosome 22. 22q13.3 deletions and mutations that lead to a loss of a functional copy of SHANK3 cause Phelan-McDermid syndrome, characterized by moderate to profound intellectual disability, severely delayed or absent speech, hypotonia, and autistic findings. In this study, our case, who was diagnosed with autistic spectrum disorder (ASD) at 9 years, was diagnosed Phelan-Mc-Dermid Syndrome by using genetic analysis and the result was discussed.

Method: A 9 year old girl, who has taken individual training for her social development, was examined in our child psychiatry department. It was learned that she had been diagnosed with ASD some years ago and had both pharmacotherapy and individual training for her treatment. In her first examination, our findings were mild intellectual disability, rounded face, pointed chin, but no autistic findings. We learned that her neuromotor development was delayed and she had neonatal hypotonia. Therefore genetic analysis was planned by genetic and child psychiatry department. Genomic DNA of the patient was isolated according to the instructions of the manufacturer from peripheral blood lymphocytes. Genomic regions previously related to mental retardation and possible deletion/duplication regions were analysed by MLPA method, using P064-C1Mental retardation and P373-B1 microdeletion probe mixes respectively. A heterozygous deletion of ARSA and SHANK3 genes located to 22q13.33 was

defined in the analysis of P064-C1 MLPA probe mix. A heterozygous deletion of MLC1, SBF1, MAPK8IP2, ARSA, SHANK3 and ACR genes located to 22q13.33 was defined in the analysis of P373-B1 MLPA probe mix. Cytogenetic analysis of GTG-banded chromosomes from cultured lymphocytes revealed a normal female karyotype. Deletion of 22q13.3 (ARSA) region was confirmed by Fluorescent in situ hybridization (FISH) technique using DiGeorge Region Probe.

Discussion: The genetic analysis of our patient showed that 22q13.3 deletions and mutations leading to a loss of a functional copy of SHANK3 caused Phelan-McDermid syndrome. Recent studies of patients with ASD indicate that SHANK3 haplo insufficiency is found in approximately 0.5% of individuals with ASD. Synaptic scaffolding protein SHANK 3, located in the postsynaptic density, is an important factor in ASD pathophysiology. Therefore patients with this syndrome can show autistic findings and can be classified as ASD as in our case. If genetic analysis could be done for patients with autistic findings, comorbidity with any genetic syndrome could be more easily recognized.

PT-005

A perceptual motor program is not associated with improvements in movement control and english vocabulary in 5 year olds from ESL backgrounds

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Perceptual Motor Programs (PMPs) are programs of physical activity aimed at improving the perceptual and motor systems of the child. Proponents of PMPs also suggest that these programs have a positive impact on academic learning, cognitive skills, social development of children, and language. The movement control and English vocabulary skills of 15 children in one preparatory class were assessed over 3 time points, at the start, middle, and end of the school year. These children were all migrants and from English as a second language backgrounds. The school ran a PMP with the children after the end of the first testing session, for 35 weeks across the school year. This involved 3 30-min sessions per week of PMP. All children tested within the normal range of IQ, as assessed using the non-verbal Raven's Coloured Progressive Matrices. The children showed no significant change in any of the subscales or the Total Score of the Movement Assessment Battery for Children (MABC) across the school year. The children, on averaged, scored below average in terms of manual dexterity and above average in terms of aiming and catching, and balance. The children showed no significant change in English vocabulary, as assessed by Crichton's Vocabulary Scale, across the school year. This group's mean English vocabulary understanding was at the 16th percentile. The PMP was not associated with improvements in movement control or English vocabulary in this group of 5 year-old children.

PT-006

A two year experience of a high resolution outpatient unit for adolescents

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Objective: Evaluate the results of an specific outpatient unit for adolescents that started functioning in October 2012. In this Unit,

patients aged 14 to 18 years are referred from General Practitioner and evaluated by a psychiatrist consultant with the aim to make a diagnosis and, if possible, return back the patient to Primary Care after the first visit with treatment recommendations if necessary.

Materials and methods: We made a descriptive study collecting data from the patients that were referred to the high resolution outpatient unit of Hospital Clínico San Carlos of Madrid since October 2012 till November 2014. We separated data from the first year and data from the second year in order to compare both.

Results: The number of patients referred from Primary care along these 2 years were 223. Patients referred in the first year were 92 and the number that attended was 71 (77.1 %). Among those who attended, 22 were discharged to Primary care (30.9 %) and 48 continued attending mental health visits for complete study and treatment (69.1 %). Among those who discharged, we recommended relaxation training in 4 cases, familiar treatment in Social Services in 1 case, substance abuse specific center in 1 case and adult mental health unit in another case.

Patients referred in the second year were 131 and the number that attended was 95 (72.5 %). Among those who attended, 38 were discharged to Primary care (40 %) and 57 continued attending mental health visits for complete study and treatments (60 %). Among those who discharged, we recommended familiar treatment in Social Services in 4 cases, substance abuse specific center in 2 cases, relaxation training in 1 case, neurology in 1 case, other psychiatry unit in a different hospital in 1 case and specific approach for gender violence problems in 1 case.

Conclusions:

- The high resolution adolescents unit is a valid model to help General Practitioners to identify and differentiate mental health problems, that need a specialized assessment and treatment, from other kind of problems that are commonly found in clinical settings (familiar problems, adolescence crisis, developmental difficulties).
- The experience along this period has let enhance the number of patients discharged after the assessment with the therapeutic advices for the General Practitioner in the second year of functioning.

PT-007

Abnormal functional architecture of amygdala-centered networks in adolescent posttraumatic stress disorder

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Objective: Posttraumatic stress disorder (PTSD) is a prevalent, debilitating, and difficult to treat psychiatric disorder. Very little is known of how PTSD affects neuroplasticity in the developing adolescent brain. Whereas multiple lines of research implicate amygdala-centered network dysfunction in the pathophysiology of adult PTSD, no study has yet examined the functional architecture of amygdalar networks in adolescent PTSD. Using intrinsic functional connectivity (iFC) analysis, we investigated functional connectivity of the basolateral (BLA) and centromedial (CMA) amygdala in sexually abused adolescents with PTSD relative to matched controls. Additionally, we examined whether altered amygdala subregional connectivity coincides with abnormal grey matter volume of the amygdaloid complex.

Methods: Seed-based correlation analysis was employed to examine the iFC of the BLA and CMA subnuclei in 19 adolescents with PTSD (age 16.2 ± 1.8) relative to 23 age, sex and IQ matched controls (age $15.5 \pm$

1.78). Subject-level iFC maps were generated by calculating temporal correlations between BLA and CMA signals and signal from all other brain voxels in a general linear model, while correcting for physiological and motion-related noise. Subject-level iFC maps were then fed into a group-level mixed-effects analysis with multiple comparisons correction ($Z > 2.3$, $p < 0.05$). Optimized voxel-based morphometry (VBM) was performed to examine gray matter volume of BLA and CMA subnuclei. Structural images were grey matter-segmented, a study-specific grey matter template was created, and all native-space grey matter images were registered to this template. Finally, voxelwise permutation-based non-parametric testing was restricted to the BLA and CMA subnuclei and corrected for multiple comparisons ($p < 0.05$). Age, sex, and IQ were included in all analyses as covariates.

Results: Our analysis revealed abnormal amygdalar connectivity and morphology in adolescent PTSD patients. More specifically, PTSD patients showed diminished right BLA connectivity with a cluster including dorsal and ventral portions of the anterior cingulate and medial prefrontal cortices ($p < 0.05$, corrected). In contrast, PTSD patients showed increased left CMA connectivity with a cluster including the orbitofrontal and subcallosal cortices ($p < 0.05$, corrected). Critically, these connectivity changes coincided with diminished gray matter volume within the BLA and CMA subnuclei ($p < 0.05$, corrected).

Conclusions: These findings provide unique insights into how perturbations in major amygdalar circuits could hamper fear regulation and drive excessive acquisition and expression of fear in PTSD. As such, they represent an important step towards characterizing the neurocircuitry of adolescent PTSD, thereby informing the development of reliable biomarkers and more effective treatment strategies.

PT-008

Adolescence and groups: an experience following pichon-rivière's operative group model with adolescent population in a community mental health centre in Southern Spain

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Introduction and objectives: Adolescence is an important development period, which supposes a gradual process of maturation. The youth must find answers to questions as self-identity, self-image, sexual-maturity, role with parents/peers and affective relationships. According to the importance of group context in this vital period, and because of the mobilizing and constructive effect that psychodynamic group therapies have, this kind of approaching supposes an effective tool which must be considered.

In a Community Mental Health Centre in Alcalá de Guadaíra (Seville, Spain), we have implemented satisfactorily a group therapy program with adolescents, following Pichon-Rivière's Operative Group model.

With this poster, the presenting authors would like to share with other professionals our personal experience, the methodology used and the results obtained.

Method: Participants: adolescent outpatients, aged 13–17 years, both genders, not taking psychopharmacological treatment. Apart from mental retardation and autistic spectrum disorders, the presence of different clinical diagnosis didn't suppose an exclusion criterion, because symptomatic heterogeneity contributes to create a relational context inside the group more similar to the external one.

Setting: closed group; 12 patients; 1 conductor therapist and 1 co-therapist; 90 min sessions weekly during 6 months.

Rating scales: Spanish validated and aged adapted versions of SCL-90-R (Symptom Checklist 90-R), SFS (Social Functioning Scale) and

PSP (Personal and Social Performance Scale); administered pre and post-treatment.

Results: Distribution of clinical diagnoses (ICD-10): Conduct Disorders (F91.x) = 2; Mixed Disorders of Conduct and Emotions (F92.x) = 3; Disorders of social functioning with onset specific to childhood and adolescence = 4; Eating Disorders (F50.x) = 2; Acute and transient psychotic disorders (F23.x) = 1.

By gender: 7 females, 5 males.

By age: 2 participants aged 13 years old; 3 aged 14; 4 aged 16; 1 aged 17.

One of the participants abandoned group follow-up after 16 weeks because of personal difficulties related to the schedule of the activity, but continued individual follow-up regularly. Another participant left after 22 weeks, not continuing other follow-up.

Comparison of pre and post-treatment scores showed that all participants experienced a clinically significant improvement both in symptoms and in personal and global social functioning.

Conclusions: Group psychotherapy with adolescents constitutes an added value to traditional individual and familial interviews, showing satisfactory results in daily clinical practice as well it supposes a cost-effective alternative. Moreover, it provides a unique scenario for training social skills and role-playing, which can't be replaced by individual therapy sessions.

PT-009

Adolescent cannabis use and genetic variability in endocannabinoid system genes (CNR1, CNR2, FAAH): interaction effects on age at onset of psychiatric symptoms

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Background: Different studies have confirmed the association between cannabis use and psychosis (Henquet et al. 2005; Moore et al. 2007), and the initiation of cannabis consumption at an early age significantly increases the risk of the appearance of psychotic symptoms in comparison to initiation in adulthood (e.g. Arseneault et al. 2002; Gonzalez-Pinto et al. 2008). These associations have been suggested to be mediated by genes involved in the endocannabinoid (EC) system (Martínez-Gras et al. 2005; Agrawal et al. 2008). The aim of our study was to investigate whether age at emergence of psychiatric disorders is related to the interaction between cannabis use and genetic variants in EC related genes such as cannabinoid receptor genes (CNR1 and CNR2) and the fatty acid amide hydrolase gene (FAAH).

Method: Cannabis use profile was obtained from 157 adolescent psychiatric inpatients (mean age 17.01 years (SD = 3.6)), 80 with schizophrenia-spectrum disorders and 77 with other non-psychotic disorders (conduct and affective disorders). A semi-structured interview based on the drug abuse section of the DIGS scale (Nurnberger 1994) was used to assess the cannabis consumption. Three single nucleotide polymorphisms (SNPs) were genotyped using Taqman 5'-exonuclease assay (AB): CNR1 (rs1049353), CNR2 (rs2501431) and FAAH (rs324420). The distribution of all genotypes was in Hardy-Weinberg equilibrium. Diagnosis group and other drugs use were included as covariates in all the analyses.

Results: Genotypes and cannabis use rates were equally distributed in the two diagnosis groups. A trend towards significance was detected

in the interaction between CNR1 (rs1049353) and cannabis use on age at emergence of the disorders ($\beta = -1.94$ $p = 0.06$), while CNR2 and FAAH did not show any effect.

Conclusion: In the understanding of psychiatric disorders emergence, our results suggest the importance of the individual's genetic background as well as the brain maturation timing in which exposure to cannabis occurs. The observed effect of CNR1 gene is supported by similar results by Leroy et al. (2001) and highlights the interest of further analyses in larger samples to clarify the role of genetic variability in modulating the individual sensibility to cannabis use and the risk for developing psychotic and non-psychotic symptoms.

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PT-010

Adolescent inpatient care: a five years' casuistic

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Adolescent inpatient care—a 5 years' casuistic

Introduction: The Department of Child and Adolescent Psychiatry Inpatient Unit was created in 1974 and provides care for adolescent patients. Younger children are exceptionally accepted. Our service has a multidisciplinary approach which is planned to offer assessment to patients with severe psychiatric symptoms, to clarify complex cases and to establish treatment that must take place in a protected environment.

Our aim is to describe the demographic and clinical characteristics of adolescents admitted to our Inpatient Unit and to compare the results with previous data collected from the period of 1999 to 2003.

Method: The authors made a retrospective study of the patients admitted in the Inpatient Unit between January 2010 and December 2014.

The demographic and clinical data collected from the Inpatient Unit case-register were: gender, age, district, origin and reason of admission, duration of stay, diagnostic categories and referral after discharge.

The reason for admission has been divided into the following categories: suicide attempts, behavioural alterations (psychomotor agitation, disruptive behaviours), psychotic symptoms, depressive symptoms, eating disturbances and others (anxiety, dissociative and obsessive-compulsive symptoms, phobias and legal issues/court orders).

We established the following diagnostic groups: Psychotic Disorder, Neurotic and Stress-Related Disorder, Mood Disorder, Conduct and Emotional Disorder, Eating Disorder, Development Disorder, Personality Disorder, Other/No Diagnosis (patients who broke off the treatment against medical advice).

Statistical analysis was conducted with SPSS v.19.0 software.

Results: A total of 626 cases were admitted to our Inpatient Unit during the established period. Approximately 20 % were readmissions.

A preponderance of female admissions was identified. The majority of patients were from the North of Portugal, mainly from the Oporto district, and the main origin of admission was the Emergency Service. The most prevalent diagnosis were Psychotic Disorder, Neurotic and Stress-Related Disorder and Conduct and Emotional Disorder. The Eating Disorders predominated in females while Psychotic Disorders were more frequent in males.

The comparison with the patients from the sample admitted from 1999 to 2003 is still under analysis.

Conclusion: The results are in consensus with the literature. This study enabled us to better understand the characteristics of the patients admitted to our Inpatient Unit and allowed to reassess the treatment provided and the needs of our patients.

PT-011

Adolescent values and psychopathology

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We examined personal goals and ideals, as a representation of underlying motivation, in a Spanish sample of children and adolescent 12–16 old. We have looked upon our measures of ideals and goals as influences that may themselves contribute to the likelihood of mental disorder. In this research values, represented by priority goals and ideals, are considered as risk or protective factors for adolescent mental health. We consider that values are not only important influences on the nature of society, but also on the well-being of individuals. Particularly, values reflect individual cognitive frames that provide an influential context for choices among alternative behaviours. They may foster life styles as maladaptive, deviant or that strengthen positive bonds with others.

Participants were 303 students attending to suburban and urban schools in Ciudad Real, Spain. The value measures include self-reported and peer-attributed approval of pro- and anti-social characteristics and behaviours and an ipsative ranking of 22 different goals for their lives. YSR (Youth Self Report) was used to assess psychopathology.

We analysed by exploratory factor analysis life goals and ideals. The resulting factors for life goals in this Spanish sample were: self-focus materialistic, support, service and have children. For ideals these analyses were carried out for the self-and peer-admire data separately. The resulting factors were antisocial, image-materialistic and prosocial.

The relationship between values and psychopathology was carried out by canonical correlation analysis. Results showed have children as a protective factor with no gender or age difference. This conventional goal factor was a protective factor for externalizing problems. The other three goal factors—materialism, support and service—were risk factors for externalising problems such as aggressive behaviour, attention problems and rule-breaking behaviour. Boys scored higher than girls. Results related to ideals, showed prosocial self as a protective factor for externalizing problems and antisocial self as a risk factor for all externalizing problems in boys and most internalizing problems in girls. Attributed antisocial emerged as a risk factor for internalizing problems in boys.

Results are discussed in a cross cultural context, comparing our results with a USA study using same measures and methodology.

Keywords: Values and mental health; Life goals and well-being.

PT-012

Alcohol use in adolescents with a history of abuse

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Introduction: Recent studies (J. Manzanares; G. Rubio, June 2014), amply demonstrate the existence of a relationship between childhood abuse history and more likely to make risky alcohol consumption in adolescence.

This could be explained by different patterns; including neurobiological, as well as psychological models that demonstrate the increased likelihood of developing not only substance abuse but also TCA, personality disorder, pathological gambling and depression.

Therefore I find of particular interest the study of alcohol consumption among such a vulnerable adolescent population.

Methodological framework: The aim of this study is to compare an observational study of alcohol use among adolescents in general population, with adolescent who are patients from a mental health center, doing a split among patients with a history of abuse and without.

Populations studied: (a) General population between 14 and 17 who attends secondary school in Spain. Data have been extracted from published sources in the National Plan on Drugs, 2012/2013, study called ESTUDES where all variables analyzed have been collected by questionnaire.

(b) Population of Mental Health Service users between 14 and 17 who have received a diagnosis according to criteria of ICD-10, of which no record of abuse or neglect is known. The sample for this population come from a Child and Adolescent Mental Health Center in Area IV of Asturias, with a minimum sample of $n = 20$

(c) Population of Mental Health Service users between 14 and 17 who have been diagnosed according to ICD-10, among which history of abuse or neglect is known. A sample comes from a child and adolescent Mental Health Center in Area IV of Asturias, with a minimum sample of $n = 20$.

Patients of different samples were applied a questionnaire about alcohol habits in which different variables are collected as age of first use, consumption characteristics, amount and frequency of alcohol consumed and other sociodemographic variables. In the subsequent analysis consumption patterns will be compared in order to show whether there are any difference.

Results and conclusions: Even I do not have results but expect increased consumption of alcohol in Mental Health population with abuse history. Also earlier start and increased binge drinking are expected.

PT-013

Altered response with methylphenidate to adhd-like symptoms in pervasive developmental disorder: does CES-1 enzyme gene polymorphism have a role?

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Objective: Pervasive Developmental Disorders (PDDs) and Attention Deficit Hyperactivity Disorder (ADHD) are two common psychiatric diseases of childhood that co-exists frequently. Classical clinical approach to treatment of this speciality of co-existence is using methylphenidate (MPH), which generally results with por out comes, and increased adverse effects.

Methods: We postulated that a genetic variation that affects the metabolism of MPH maylie in the etiology of disrupted drug response. For clarifying this we searched for four polymorphisms (Arg199/His, Ser75/Asn, Ile49/Valand Gly143/Glu) in carboxylesterase-1 gene (CES1) in the saliva of patients diagnosed with PDD+ADHD. Also, weas sessed the clinical response to MPH by dimensional approachusing the Attention

Deficit Hyperactivity Disorder Rating Scale IV and Clinical Global Impression-Improvementscale.

Results: PDD + ADHD groups had significantly higher Arg199/His polymorphism, and clinically responded poorer—and even worsened—to the MPH treatment compared with “pure” ADHD and ADHD + MR groups.

Conclusion: This is the first study that defines an association between Arg199/His polymorphism in CES1 and altered treatment response to MPH in patients with PDD that presents with symptoms of ADHD.

Keywords: PDD, ADHD, MPH, CES-1, Pharmacogenetic.

PT-014

Altered resting-state connectivity in offspring of schizophrenia patients relative to offspring of bipolar patients and controls

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Background: Schizophrenia (Sz) and Bipolar (Bp) disorder are acknowledged to share clinical features, genetic risk factors and structural and functional brain patterns. Patients with Sz or Bp as well as their first-degree relatives have shown abnormalities in the Default Mode Network (DMN) during rest. No studies have assessed resting state functional connectivity in young offspring of Sz and Bp patients comparatively. We aimed to study the pattern of connectivity of the DMN, in addition to other cognitive networks in child and adolescent offspring of Sz (SzO) and Bp patients (BpO).

Methods: One hundred and twenty-six children and adolescents aged 7 to 19, with a parent with Sz or Bp and community controls (CcO; absence of diagnosis of Sz or Bp in 1st or 2nd degree relatives) were recruited from the Hospital Clinic of Barcelona, Spain. High resolution T1 images and an 8-min functional magnetic resonance imaging (fMRI) at rest were acquired on a 3 Tesla MRI scanner. Excessive head motion, defined as 1.5 mm translation in any axis, led to exclusion of 19 subjects. Two more subjects were excluded due to ventriculomegalia. fMRI data was preprocessed and subjected to spatial independent component analysis (ICA), employing the Group ICA fMRI Toolbox. Four networks were identified: DMN, Basal Ganglia, Executive Control (ECN) and Salience Network. ANCOVA models were executed with age and gender as covariates. Results were interpreted at a voxel-wise threshold of $p < 0.001$ and at a cluster-wise threshold of $p < 0.05$ (family-wise error corrected). Post-hoc analyses included measurement of caudate volumes with Freesurfer.

Results: The final sample included 106 subjects (27 SzO, 38 BpO, 41 CcO, mean ages: 11.96, 13.89 and 13.37 respectively). Relative to CcO, SzO revealed decreased connectivity in the caudates ($t = 4.38$, $p_{FWE} = 0.008$) within the Basal Ganglia network. Further, the volume of the left caudate was significantly reduced in SzO ($F = 5.09$, $p = 0.028$). Relative to BpO, SzO showed increased connectivity in the right precentral gyrus ($t = 4.05$; $p_{FWE} = 0.013$) and decreased connectivity in the right angular gyrus ($t = 4.76$; $p = 0.029$). No differences were observed between BpO and CcO.

Conclusions: SzO exhibited abnormalities in connectivity in both caudates, a key dopaminergic region, accompanied by a volumetric reduction in the left caudate. Altered connectivity in the DMN and in the ECN was also found, which mirror observations from adult

patients. Current results suggest that abnormalities in these resting state networks during youth may be specific to SzO.

PT-015

An investigation of the microstructural organisation of the fronto-parietal branches of the superior longitudinal fasciculus using constrained spherical deconvolution based tractography in autism spectrum disorders

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Background: Primate and post-mortem research has established that the superior longitudinal fasciculus (SLF) is a white matter tract largely composed of three fronto-parietal longitudinal pathways, the SLF I, II and III. It has been suggested that the SLF I sub-serves the dorsal attention network (DAN), the SLF III sub-serves the ventral attention network (VAN) and the SLF II facilitates communication between these networks. The branches of the SLF have never been isolated in an ASD population. Investigating each distinct branch is important for understanding the neural correlates of attention dysfunction in ASD. As the process of attention is lateralised, evaluating the symmetry of the SLF is also crucial for understanding impaired attention in ASD.

Methods: High angular resolution diffusion imaging (HARDI) data (61 directions, b -value = 1500 s/mm^2) was acquired for 45 cases and 45 controls. Preprocessing was completed using ExploreDTI software (<http://www.ExploreDTI.com>). Data quality checks were performed and subject motion and eddy current induced geometric distortions were corrected. The B-matrix rotation was also performed to maintain orientation of the data. The tensor model was applied to the data using robust estimation of tensors by outlier rejection (RESTORE) method. CSD tractography was then performed and the SLF I, II and III were isolated. FA, CL and CP measures were extracted and independent t-tests were completed. All statistical analyses were Bonferroni corrected at a significance level of $p < 0.05/3 = 0.0166$

Results: In the left SLF I, the ASD group showed greater CL ($F(1, 88) = 9.204$, $p = 0.003$) and a strong trend towards greater FA ($F(1, 88) = 5.772$, $p = 0.018$) relative to the control group. In the right SLF II, the ASD group also showed greater FA ($F(1, 88) = 7.221$, $p = 0.009$) and greater CL ($F(1, 88) = 7.862$, $p = 0.006$) than controls. In the SLF III, the ASD group had significantly greater right lateralisation of FA ($F(1, 88) = 8.792$, $p = 0.004$) and borderline significance in CL ($F(1, 88) = 5.899$, $p = 0.017$) in comparison to the control group.

Conclusions: Abnormal structural connectivity of the SLF I, II and III was described thus further substantiating the theory of disrupted cortical connectivity in ASD. The branches of the SLF have been associated with the dorsal and ventral attention networks thus it is reasonable to suggest that aberrant structural connectivity may underpin attentional deficits in ASD.

PT-016

Arachnoid cyst and child psychiatric disorders. A case report

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Introduction: Cysts Arachnoid (AC) are cavities containing cerebrospinal fluid and, in most cases, are located between the layers of the arachnoid or between the arachnoid inner layer and the pia mater, often communicate with the subarachnoid space. Most of those seen in children are congenital and asymptomatic or present with insidious symptoms, therefore the diagnosis is often delayed until adolescence. Symptoms vary depending on the size and location of the cyst. Have been associated with developmental disorders, mental retardation and other psychiatric disorders such as ADHD, behavioral disorders and psychoses (auditory hallucinations). The diagnosis is usually incidental in a magnetic resonance imaging (MRI), you can do other complementary tests such as EEG. Treatment may be conservative or surgery.

Objectives: The purpose of this paper is to reflect on possible cognitive behavioral consequences of some arachnoid cysts. To investigate whether Arachnoid Cysts compromise cognitive function and psychological profiles in pediatric patients.

Methodology:

- Literature search using the database PUB-MED
- Case Report

Results:

- Some studies report that men are four times more likely to have cysts than women and refer the presence of difficulties with memory, language, executive functions and behavior problems.
- There have been cases where it has been associated with symptoms of alexithymia, altered mood and aggression in left fronto-temporal localization, psychosis associated with AC temporary location, ADHD associated with AC in the left temporal lobe and anxiety most often in cysts front location than in cysts temporary location.

Case report: Neuropsychological and behavioral sequelae in a patient presenting with an AC of parieto-temporal localization left diagnosed at 4 years of age. Currently the patient has an age of 18 years and a follow-up story in Psychiatry from 4 years old. It has carried out an extensive evaluation protocol I both, psychopathological/behavioral and social to know in depth the clinical characteristics of the patient and the possible relationship with the location of arachnoid cyst presenting cognitive level.

Conclusions: The prevalence of arachnoid cysts (AC) is considerably increased in psychiatric patients, suggesting a possible causal relationship between AC and certain psychiatric disorders.

While much of the literature says that patients with arachnoid cysts usually no clinical symptoms, other studies claim the existence of cognitive and psychopathological/behavioral sequelae in these patients.

In the case presented, we believe that the observed deficits may be related to the location and mass effect caused by the cyst in the left temporo-parietal pole.

PT-017

Association between the metabotropic glutamate receptor7 RS3749380 polymorphism and methylphenidate treatment outcome in children with attention-deficit/hyperactivity disorder

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Association between the metabotropic glutamate receptor7 rs3749380 polymorphism and methylphenidate treatment outcome in children with attention-deficit/hyperactivity disorder

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Objectives: Attention-deficit/hyperactivity disorder (ADHD) is a heritable neurodevelopmental disorder characterized by inattention, disorganization, and/or hyperactivity-impulsivity. This study investigated the association between the metabotropic glutamate receptors (GRM) 7 rs3749380 polymorphism genotypes and subjective/objective treatment responses to methylphenidate (MPH) in Korean children with ADHD.

Methods: This study enrolled 86 medication-naïve children with ADHD in an open-label 8-week trial of MPH. The subjects were genotyped and then evaluated using the ADHD Rating Scale (ARS), the Continuous Performance Test (CPT) and the Clinical Global Impression Scale (CGI) before and after treatment.

Results: Genotype analysis of the GRM7 rs3749380 polymorphism identified the C/C genotype in 55 subjects (63.95 %), the C/T genotype in 28 subjects (32.56 %), and the T/T genotype in 3 subjects (3.49 %). The C allele of the GRM7 rs3749380 polymorphism was identified in 138/172 chromosomes (80.23 %) and the T allele was identified in 34/192 chromosomes (19.77 %). After 8 weeks of treatment, the total ARS score decreased, from 33 (22,50) at baseline to 18 (5,41) in C/C genotype, from 30.5 (25,50) at baseline to 13 (4,36) in C/T genotype and from 34 (28,36) at baseline to 13 (11,26) in T/T genotype, indicating an improvement in symptoms. After 8-week MPH treatment, children with the GRM7 rs3749380 polymorphism T/T genotype had a different response in terms of visual response times and auditory commission errors on the CPT than C/C or C/T genotype groups. Dunn's test revealed that with respect to visual response times, TT genotype was marginally significantly different from CT ($p = 0.052$) and significantly different from CC ($p = 0.046$). And with respect to auditory commission errors, TT genotype was significantly different from CT ($p = 0.034$).

Conclusions: These results suggest that the GRM7 rs3749380 polymorphism is associated with the response of MPH in patients with ADHD. Further studies, including replication of our findings using a control or comparison group and a larger sample, are warranted to evaluate the association between the GRM7 genes and treatment responses to MPH in subjects with ADHD.

Keywords: Attention-deficit/hyperactivity disorder, Metabotropic glutamate receptor7 rs3749380, T/T polymorphism, Methylphenidate, Treatment response.

PT-018

¿Attention deficit disorder with hyperactivity or juvenile Huntington disease? Case report and review of differential diagnosis

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Huntington Disease is a dominantly inherited, neurodegenerative disorder, usually with onset in the fourth to fifth decade of life but in a small proportion of patients before the age of 20 years. The early-onset form, Juvenile Huntington disease, is clinically different from that of more common adult-onset forms and includes cognitive decline, parkinsonism, myoclonus, and seizures. Whereas adult-onset Huntington disease is a well-characterized clinical entity, childhood-onset cases have not received as much attention.

Patients with Juvenile Huntington disease started showing disease symptoms through nonspecific features, mostly psychiatric and cognitive difficulties. This led to misdiagnosis or diagnosis delay, especially in cases without a familial history of Huntington Disease.

We report a case of a 13-year-old boy, originally from South America, adopted since the time of 24 months of age, with unknown records of the disease because of limited family background information.

Due to hyperactivity, attention difficulties, poor school performance, zero tolerance to frustration, irritability and aggressivity, the patient received psychological monitoring for a period of a year without obtaining symptoms improvement. Later, he was referred to psychiatric treatment because symptoms of attention-deficit hyperactivity disorder became evident and he started on a trial of Methylphenidate. After 2 months, he experienced a rapid decline in fine motor skills, with dysarthria and diffusely increased tone. Despite cessation of Methylphenidate, symptoms persisted and we decided to perform genetic evidence that could make a differential diagnosis. The results showed an expansion in CAG repeats to 71 copies confirming the diagnosis of Juvenile Huntington Disease.

The case presented here emphasize the spectrum of neuropsychiatric phenomena associated with Huntington Disease, illustrate the resulting difficulties of differential diagnosis in clinical settings and highlights the fact that using dopamine agonists in patients with history of Huntington Disease, can cause significant deterioration in motor symptomatology.

Treatment goals in Juvenile Huntington Disease are to reduce the burden of symptoms, maximize function and quality of life, that's why, it is very important not to delay the diagnosis.

The case presented here, emphasize the spectrum of neuropsychiatric phenomena associated with Huntington Disease and illustrate the resulting difficulties of differential diagnosis in clinical settings.

PT-019

Bullying, self-harming behaviour and attempted suicide among adolescents in Lithuania

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Introduction: There is a growing interest in adolescent health and recognition of its importance for public health through the life course. The need to give adequate attention to the health and development of adolescents is being acknowledged.

Study aimed to estimate the prevalence and causation of deliberate self-harm, attempted suicide, bullying and cyber-harassment among adolescents in Lithuania.

Methods: Data come from large adolescent health research, a study of demographic factors, activities, attitudes, strengths and difficulties, help-seeking and risk behaviors, bullying, overall health and related factors among adolescents, which was conducted during 2012 spring in Lithuania. The sample included 44 public middle and high schools in four randomly selected geographic regions of Lithuania (all schools from 3 municipalities: Kaišiadorys, Kelmė and Molėtai, 2 schools from Vilnius District municipality and 1 school from Vilnius City municipality). All pupils of 7-10 grades in every school were interviewed. Administrative judgement towards the aims and intentions of the study was positive and all originally selected schools agreed to participate. Procedure of investigation was organised and conducted smoothly. Anonymous questionnaire was completed by 3858 participants.

Results: Data showed that 11.9 % respondents harmed themselves. Self-cutting was the most common method of self-harm (60.1 % of those who harmed). 37 % respondents indicated that they thought about suicide, 11.6 % indicated that they thought about it seriously, 5.5 % noted that they had attempted suicide. Girls were more prone to self-harm and suicidal ideation. 28.7 % of respondents reported being bullied in school environment, 10.7 % outside the school, 12.2 % on cyberspace. 34.4 % bullied at school, 21.9 % outside school, 9.9 % on the cyberspace. Various connections of the data will be presented.

Conclusions: Every specialist who works with children has to be able to notice and detect self-harming behavior, assess for risk of repetition and suicide risk and find relevant treatment strategies. Community education on youth mental health issues together with implementation of systematic long-term prevention and early intervention programs should be active and prioritize in our country.

PT-020

Burden-focused psychosocial therapy with parents of children with bipolar spectrum disorders

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Background: Family burden is considered to be a dynamic integrated psychosocial parameter negatively impacting on symptom levels and social functioning of children with bipolar disorders (BD). Specific measures directly aimed at lessening the burden of families with children with bipolar spectrum disorders, such as psychosocial interventions, should be developed. Furthermore effective psychosocial interventions should rely on parents by which cure is delivered directly to the children. This survey is aimed at assessing the impact of burden-focused group therapy (BFGT) with parents on social functioning of children and adolescents with bipolar spectrum disorders.

Methods: Parents of 72 children (10–17 years) diagnosed with BD (based on DSM-IV criteria) with administered standard antipsychotic therapy were recruited into this study conducted in Moscow research institute of psychiatry. Parents were assigned to eight 90-min "module" structured sessions carried out in groups (8–9 members). The efficacy was analyzed using multi-source assessments, including questionnaires for mother and social functioning of children evaluations (CGI, CGSQ, ILC and CGAS at entry and after 1, 3, 6 and 12 month).

Results: Reciprocal effect with negative correlation ($r = -0.458$, $P = 0.005$) between family burden indicators and children's total levels of social functioning was established. BFGT did significantly affect family burden and correlated with positive changes in overall levels of social functioning of children as measured by CGAS ($p < 0.05$). The largest decline was noted in Subjective burden (from 4.95 to 3.75 according to CGSQ). Furthermore BFGT appears to reduce emotional burdens for caregivers.

Conclusions: BFGT, directly aimed at managing family burden and improving children's social functioning, proved to be one of the key components of the psychosocial treatment and rehabilitation of children and adolescents with bipolar spectrum disorders in the context of increasing parenting resource and rehabilitation potential of the families. Participants report high levels of satisfaction, and greater attendance is linked to better understanding of mental illness, awareness of resources, including the forming parent's community, and ability to engage in child-care activities and thus contribute to improving child's level of social functioning. Further controlled studies are required to strengthen the evidence base for effective management of family burden.

PT-021**Camh policy in Russia: current trends**

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Child & adolescent psychiatric care is a part of general psychiatric service. Nowadays medical care of children and adolescents are united to one service, but subdivision of specialties to “children’s” and “adolescent’s” still remains. Apparently, in Russia, “child and adolescent psychiatry” does not have a normative definition in official documents. Disabled children with severe mental retardation receive government welfare. The Russian Federal Law “On Psychiatric Care and Patient Rights as it is Rendered” of 1992 is very important for the modern state of psychiatric service. There were endorsed psychiatric examination norms for minors, rules for their hospitalization or admission to special educational institutions, as well as rules of discharge from psychiatric hospitals and other special institutions. The law founded the basis for legal and social regulations of psychiatric patients and gave public organizations the possibility to control the rights of mentally ill in psychiatric hospitals. There are no officially determined and adopted principles of psychiatric care for children and adolescents. The distribution of the psychiatric care is based on a principle of district service. There are no structures for specialized care for different forms of psychiatric disorders. Care for children with mental abnormalities is divided into three departments: Public Health, Education, and Social Protection. Two main types of psychiatric care—outpatient (in psychiatric dispensaries and outpatient clinics) and inpatient (in the children’s psychiatric departments of district psychiatric hospitals)—belong to the Public Health Department. Cooperation between psychiatrists and non-medical institutions and professionals is hampered by their dependence to different departments. All other forms of psychiatric service organization are not practically in use. There is only one non-governmental professional organization—Association of Child Psychiatrists and Psychologists, which was found in 1992. The number of ACPP members currently is about 150 from 16 regions of Russia, from Lithuania, Estonia, and Kirgizien. The ACPP unites child and adolescent psychiatrists, psychologists, and children’s specialists of allied disciplines. ACPP together with other organizations are working for realization of Child Psychiatric Service (CPS) plan. Those changes are necessary and inevitable because they follow the needs of the children’s population and basic trends of child psychiatry all over the world.

PT-022**Care of adolescents suffering school phobia: contributions from multidisciplinary work led by “teenagers’home” service, at avicenne hospital in Bobigny, France**

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Introduction: In our modern society, the difficulties teens are facing up during school time are a pattern of frequent consultation. Among these disorders, school phobia coming out during adolescence shows

a steadily increasing incidence in child psychiatric consultations. This increase and the difficulty to treat this disorder with only child psychiatric consultations led us to re-considerate our practices at Avicenne Hospital “home teenagers” service.

Methods: This study is a frontier research driven in 2014, by the use of eight situations from eleven to seventeen years, in the Avicenne Hospital “Teenagers’ home”, located in the city of Bobigny, France. The method consisted in using the synergy from multidisciplinary work, specific of a “teenagers’ home” team, and more particularly between child psychiatrist and school psychologist. Regular meetings were an opportunity to compare our respective theoretical approaches and share clinical data from our consultations with adolescents whose school problematic was at the forefront.

Results: The experiment’s results show the real interest of this co-ordinated approach combining psychiatric and psychological consultations with these adolescents and their family. It has to be focused on the interaction between their cognitive and psycho-affective spheres, the effects of this interaction on their reports to learning and the connection with school partners for the returning to school as fast as possible. Indeed, the faster the patient returns to school, the better the prognosis. This methodology requested a constant adjustment of our respective function in this joint work. It led to identify common psychopathological hypotheses from different clinical situations by using the “life narrative” as a method of investigation but also as a therapeutic lever, distinguishing the schooling evolution narrative during the psychological consultations, and the family history narrative during the psychiatric consultations

Conclusion: This experiment shows the values of a complementary work leading between two professions and particularly in these complicated situations. The stories of the adolescence’s school history and the family history are complementary working tools, allowing access to the full historical profile of a child who became a student and then a teen student, enabling us to improve the situation understanding, initiating a therapeutic alliance and enhancing adolescent self-esteem. These results should lead to the establishment of further study in the course of 2015.

Keywords: School phobia, Narrative, Interdisciplinary health team.

PT-023**Child and adolescent mental health care in Finland: changing trends**

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Finland is a sparsely populated country with 5.5 million inhabitants in an area of about 340,000 km². Most inhabitants live in Southern Finland, the fact giving challenges to the health care systems especially in the Northern parts of the country. About 43.5 % of the families with children have only one child, 51.5 % have two or three children and only 5 % have four or more children. There are relatively more large families in the Northern parts of the country.

The mental health care services for children and adolescents have included primary health care, e.g. child welfare clinics, child guidance clinics, health centers and school health care services. Services have varied in different municipalities and parts of the country. There are 21 Central Hospital Districts in Finland, most of them giving child and adolescent inpatient as well as outpatient treatment. However, a change in the social and health care services is now on process. The main targets of the change are to guarantee equal services in different parts of the country, back up primary health care services and outpatient treatment and to better connect social and health services. Challenges are high especially in the most sparsely populated areas of

the country, where the closest services have been reached only in distance of hundreds of kilometers. The use of information technology is a great possibility and necessity. The child and adolescent mental health care services in Finland and needs for them shall be introduced in the presentation.

PT-024

Child-rearing styles in the offspring of parents with schizophrenia and bipolar disorder

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Objective: This is the first study to compare the child-rearing styles as perceived among the offspring of at least one parent with schizophrenia, bipolar disorder or community control parents.

Methods: 90 offspring (6–17 years) of 54 parents with bipolar disorder (BpO), 40 offspring of 34 with schizophrenia (SzO) and 107 offspring of 65 community controls (CcO) were evaluated. Proband parents and biological co-parents were assessed using the Structured Interview for DSM-IV (SCID- I). Parenting styles were explored by child self-rating using the Parental Bonding Instrument (PBI), father and mother forms. For the statistical analyses, the 25 items of the PBI were distributed on the Care and Overprotection subscales, following the original factorial structure by Parker et al. One-way ANOVAs with Games-Howell and Bonferroni post hoc correction were calculated for the three groups. Parental child rearing styles were classified into one of the following quadrants using the median values of the Care and Overprotection subscales of the CcO sample as cut-off points: ‘affectionate constraint’ (high care and high protection), ‘affectionless control’ (high protection and low care), ‘optimal parenting’ (high care and low protection) and ‘neglectful parenting’ (low protection and care).

Results: Distribution of child-rearing styles among the parental bonding quadrants is shown in Table 1. SzO reported higher scores in Mother Care ($p = 0.001$) and Overprotection ($p = 0.022$) than BpO, while no differences were found between SzO or BpO and CcO. SzO reported a maternal rearing style characterised by ‘affectionate constraint’ more frequently than BpO ($p = 0.003$). BpO reported more frequently maternal ($p = 0.038$) and paternal ($p = 0.033$) ‘neglectful parenting’ style than SzO. Paternal ‘optimal parenting’ was more frequently reported for SzO than for CcO ($p = 0.013$), and maternal ‘affectionate constraint’ for CcO than for BpO ($p = 0.032$).

Table 1.

Affectionate constraint			Affectionless control				
	SzO (%)	BpO (%)	CcO (%)		SzO (%)	BpO (%)	CcO (%)
Mother	42.9	13.3	26.9	Mother	9.5	16.0	14.0
Father	33.3	25.0	27.8	Father	11.1	12.5	20.0
Optimal parenting			Neglectful parenting				
	SzO (%)	BpO (%)	CcO (%)		SzO (%)	BpO (%)	CcO (%)
Mother	23.8	21.3	21.5	Mother	23.8	49.3	37.6
Father	44.4	25.0	17.8	Father	11.1	37.5	34.4

Conclusion: The offspring of at least one parent with schizophrenia, perceive their mothers as more caring and overprotective than bipolar offspring. Maternal ‘affectionate constraint’ rearing style is the most frequently reported style in schizophrenia offspring, while ‘neglectful parenting’ represents the more frequent parental bonding style in families with at least one parent with bipolar disorder.

PT-025

Children who are the focus of teachers concern and are due to transition from primary to secondary education, have raised SDQ scores. Can activity projects help?

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Promotion of child mental wellbeing is an important part of UK early intervention policy. There is specific concern about children who are ‘at risk’ or disadvantaged. The 1958 birth cohort study finds that poor mental health at 7 and 16 was a significant determinant for poor mental health outcomes into adulthood, as well as lower educational attainment, poorer health and lower social status as adults. Early intervention in terms of the mental health of children is promising as we are beginning to fully understand the impact that poor mental health as a child has on achievement as an adolescent and also as an adult (Case et al. 2005).

In early intervention models the person or group of people are identified as being at risk due to certain characteristics or behaviour. The need to change is less prominent in early intervention; instead there is a need to learn skills and tools that can act as a protective factor against risks later in life. ‘Activity’ projects are being used to try and help vulnerable children negotiate the transition to secondary school. Are they effective and which children benefit most?

Method: Teachers referred children that they were concerned about and completed a measure of wellbeing (SDQ) and a reason for concern form before and after the activity project.

Results: Reasons that children are referred to transition projects include concerns about their behaviour, attendance, self-confidence and self-esteem. Pre-project SDQ’s ($n = 50$) show that these children have high ‘overall stress’ scores. Following the intervention ‘overall stress’ scores improved, particularly for children referred for emotional symptoms, suggesting that the projects are enhancing self-esteem and self-confidence. For children referred for concerns about behaviour there was no improvement.

Conclusion: Negative school experiences, lack of self-confidence and self-esteem, and persistent truancy can be linked to poor educational attainment. Early intervention projects designed to support vulnerable children in the transition to secondary school have a positive effect on the children’s emotional symptoms. It is important to recognise that these projects will not be successful for all children and do not appear to improve outcomes for children about whom the concerns are about behaviour.

PT-026

Children with anxiety disorders show a Vigilance-avoidance pattern of threat-processing: evidence from meg-based source localization

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An altered pattern of threat-processing is assumed to play a key role in the development of anxiety disorders (AD). According to a vigilance-avoidance hypothesis, patients with AD show heightened vigilance to threat cues at early but avoidance at later stages of processing (Mogg et al. 2004). Attentional vigilance is assumed to be based on an automatic threat detection mechanism mediated by the amygdala, while attentional avoidance is thought to reflect emotion regulation mediated by the prefrontal cortex (PFC). A central role of these neural structures is confirmed by fMRI studies in both adults and children with AD. However, due to its limited temporal resolution fMRI cannot differentiate early and late stages of processing. For this purpose, EEG and MEG seem most suitable. Indeed, adults with AD show enhanced threat-responses in early (around 100 ms) and reduced threat-responses in late (>200 ms) EEG components. However, it is unclear if such an effect can also be observed in children with AD and, if so, which neural sources are involved. The aim of the present study was to test the vigilance-avoidance hypothesis in children with AD and highlight relevant neural sources in early vs. late time-intervals. To this end, the processing of faces with angry and neutral expressions was investigated in children with AD and healthy control (HC) children by whole-head magnetoencephalography. Neural sources reflecting threat-processing in early and late time-intervals were estimated based on L2-minimum norm inverse source modelling. Significant interactions ($P < 0.05$) of time (early vs late) \times expression (angry vs neutral) \times group (AD vs HC) were localized in two regions, the right dorsolateral PFC and the left occipital cortex (OCC). Post hoc T-tests indicate that AD children showed enhanced threat-processing in the left OCC in the early ($T(44) = 2.05$; $P < 0.05$) but not late time-interval ($T(44) = 0.16$; n.s.). HC children showed the reverse pattern, with no effect in the early ($T(44) = 0.12$; n.s.) but enhanced threat-processing in the late time-interval ($T(44) = 2.91$; $P < 0.01$). Additionally, in the late time-interval, AD ($T(44) = 2.76$; $P < 0.01$) but not HC children showed enhanced neural activity in response to threat in the right dorsolateral PFC. These results support the vigilance-avoidance hypothesis of threat processing in children with AD. It is suggested that the late enhancement of activity in the dorsolateral PFC may reflect an inhibition of sensory threat processing in the OCC.

PT-027

Children's mental wellbeing effects their educational outcomes. Can early intervention activity projects help?

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Children Mental Wellbeing Effects Their Educational Achievements. Can Early Intervention Activity Projects Help?

Promotion of child mental wellbeing is an important part of UK early intervention policy. There is specific concern about children who are 'at risk' or disadvantaged. The 1958 birth cohort study finds that poor mental health at 7 and 16 was a significant determinant for poor mental health outcomes into adulthood, as well as lower educational attainment, poorer health and lower social status as adults. Early intervention in terms of the mental health of children is promising as we are beginning to fully understand the impact that poor mental health as a child has on achievement as an adolescent and also as an adult (Case et al. 2005).

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PT-028

Clinical picture during childhood/adolescence of adult patients admitted as inpatients with a schizophrenia spectrum disorder diagnosis

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Introduction: Description of developmental trajectories during childhood/adolescence of adults with schizophrenia spectrum disorders may help understand the etiopathogeny of this group of illnesses and better develop early intervention programs addressing detection of prodromal symptoms. At least a group of these disorders are considered neurodevelopmental disorders. Prospective epidemiological cohorts and premorbid adjustment scales have been useful to describe premorbid difficulties in childhood (such as motor coordination problems, cognitive impairment, and poor social adjustment) related to later diagnosis of schizophrenia. Moreover, schizophrenia associated with deficit syndrome is lately being considered a different entity with specific neurobiological correlates, with worse prognosis and worse social premorbid adjustment. Retrospective chart review may be helpful when data are gathered systematically in a child psychiatry unit and psychological standardized assessment is done.

Methodology: Clinical reports of patients born between 1984 and 1996 who had attended a child psychiatric clinic during childhood/adolescence and afterwards were admitted to an adult inpatient psychiatric unit in the same hospital were reviewed. Patients who had received a diagnosis of schizophrenia spectrum disorder as adults were compared to those with other diagnoses in terms of data gathered during childhood regarding their symptomatology (Social Difficulties Questionnaire-SDQ- and DSM-IV diagnosis) and

cognitive performance (WISC-R) and psychomotor development when available.

Results: 76 patients aged 18 to 30 y/o admitted to a psychiatric inpatient unit between 2002 and 2014, had previously attended a child psychiatric outpatient clinic in the same hospital. During childhood, most frequent chief complaints were attention, behavioral and social problems. As adults, 50 % received a schizophrenia spectrum disorder or other psychotic disorder diagnosis. Five percent of total met criteria for schizophrenia with deficit syndrome. Those patients with a schizophrenia spectrum disorder will be compared in terms of childhood adjustment to those with other diagnoses. Differences in SDQ scores and DSM-IV diagnoses will be presented. Special attention will be paid to those patients with deficit syndrome associated to schizophrenia.

PT-029

Cognitive performance in children and adolescent with perinatal HIV infection in Poland

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Objectives: The CANTAB battery had not been used before to assessed cognitive impairment in perinatally HIV-infected children. The goal of the study was to assess the effects of perinatal HIV infection on the cognitive functions in population of Polish children and adolescent patients and association between cognitive performance and HIV disease status.

Methods: The study was carried out in The Clinic of Infectious Diseases of Childhood in Warsaw's Hospital for Infectious Diseases. 50 vertically HIV-infected children, aged 6 to 18, were examined during one session. Patients completed the Cambridge Neuropsychological Test Automated Battery (CANTAB). The five CANTAB test used included: Motor Screening Task (MOT), Reaction Time (RTI), Stocking of Cambridge (SOC), Intra/extra Dimensional Shift (IED), Spatial Working Memory (SWM).

Results were compared to published age and gender-matched norms using z-scores. Medical data were also recorded (CD4%, viral load, CDC clinical category at HIV diagnosis) to identify HIV-related factor associated with cognitive performance.

Results: The patients were impaired on movement time and on reaction time in RTI test. They showed impaired initial and subsequent thinking time on the SOC task. They also solved less problems in minimum moves. The patients were also impaired on the task of attentional set shifting (IED), requiring more trials to criterion at the intradimensional stage of the task and had more total errors (adjusted) and more total trials (adjusted). In the SWM test they made significantly more within- and double- search errors. There were no association between cognitive performance and CDC clinical category and age at HIV diagnosis. There were only connection between age of examination (duration of HIV infection) and impairment on reaction and movement time, time of initial and subsequent thinking time.

Conclusions: The main deficits in vertically HIV infected children were in the tests of executive function: Stocking of Cambridge

planning task, attentional set shifting, spatial working memory but also in the test of speed of movement. These are the test that have been shown to be particularly sensitive to frontostriatal dysfunction in humans. The no association between clinical status and cognitive performance may be connected with early diagnosis in most of the patients. Further studies are required to recognize other factors (i.e.: socioeconomic status) underlying cognitive impairments in vertically HIV infected children

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PT-030

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Cognitive performance in children and adolescent with perinatal HIV infection in Poland.

Objectives: The CANTAB battery had not been used before to assessed cognitive impairment in perinatally HIV-infected children. The goal of the study was to assess the effects of perinatal HIV infection on the cognitive functions in population of Polish children and adolescent patients and association between cognitive performance and HIV disease status.

Methods: The study was carried out in The Clinic of Infectious Diseases of Childhood in Warsaw's Hospital for Infectious Diseases. 50 vertically HIV-infected children, aged 6 to 18, were examined during one session. Patients completed the Cambridge Neuropsychological Test Automated Battery (CANTAB). The five CANTAB test used included: Motor Screening Task (MOT), Reaction Time (RTI), Stocking of Cambridge (SOC), Intra/extra Dimensional Shift (IED), Spatial Working Memory (SWM).

Results were compared to published age and gender-matched norms using z-scores. Medical data were also recorded (CD4%, viral load, CDC clinical category at HIV diagnosis) to identify HIV-related factor associated with cognitive performance.

Results: The patients were impaired on movement time and on reaction time in RTI test. They showed impaired initial and subsequent thinking time on the SOC task. They also solved less problems in minimum moves. The patients were also impaired on the task of attentional set shifting (IED), requiring more trials to criterion at the intradimensional stage of the task and had more total errors (adjusted) and more total trials (adjusted). In the SWM test they made significantly more within- and double- search errors. There were no association between cognitive performance and CDC clinical category and age at HIV diagnosis. There were only connection between age of examination (duration of HIV infection) and impairment on reaction and movement time, time of initial and subsequent thinking time.

Conclusions: The main deficits in vertically HIV infected children were in the tests of executive function: Stocking of Cambridge planning task, attentional set shifting, spatial working memory but also in the test of speed of movement. These are the test that have been shown to be particularly sensitive to frontostriatal dysfunction in

humans. The no association between clinical status and cognitive performance may be connected with early diagnosis in most of the patients. Further studies are required to recognize other factors (i.e.: socioeconomic status) underlying cognitive impairments in vertically HIV infected children

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PT-031

Cognitive resting-state networks from childhood to late adolescence: age and gender effects

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Introduction: Resting state networks (RSN) underlying cognitive functions have been identified in childhood, and undergo maturation during adolescence. Only a limited number of studies have assessed the effects of age and sex on the connectivity of these networks in paediatric samples.

Methods: One hundred fifty-four healthy subjects aged 7-18 were recruited from the Child and Adolescent Psychiatry and Psychology Department, Hospital Clínic, Barcelona. Subjects had no history of lifetime axis I disorder, no use of psychotropic medications or illicit substances and no family history of psychosis in either first or second-degree relatives. High resolution T1 images and an 8-min functional magnetic resonance imaging (fMRI) at rest were acquired on a 3 Tesla MRI scanner. Excessive head motion (>1.5 mm translation), led to exclusion of 22 subjects. The final sample consisted of 132 subjects (50 aged 7–12, 46 aged 13–15 and 36 aged 16–18). fMRI data was preprocessed, and subjected to spatial independent component analysis. The default mode network (DMN), executive control (ECN), salience and language RSN were identified. Multiple regression analyses were carried out for RSN to study the effect of age, followed by ANOVA models comparing the three age groups (childhood, early and late adolescence) separated by gender. Results were interpreted at a voxel-wise threshold of $p < 0.001$ and a cluster-wise threshold of $p < 0.05$ (family-wise error corrected).

Results: Linear models showed, for the DMN, a positive effect of age in the medial frontal cortex and a negative effect of age in the right middle frontal cortex. For the ECN, there was a positive effect of age in the left superior parietal cortex. No effects of age or sex were seen for the anterior salience or language RSN. Group comparisons revealed, for the DMN, increased connectivity within the medial frontal cortex in boys during late adolescence, while girls exhibited increased connectivity within the left superior temporal cortex in early adolescence. For the ECN, there was a transient peak of connectivity during early adolescence for girls in the left medial frontal and right lingual area.

Conclusions: During development, connectivity within the DMN becomes more medial, with boys connecting more medial frontal regions during late adolescence and girls connecting left temporal areas at an earlier stage. For the ECN, there was increased connectivity of the left superior parietal cortex with age, with transitory sex-related differences. These findings add to understanding of development of RSN in healthy youth.

PT-032

Coming out in front of five hundred adolescents: the experience of a person with lived experience

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Background: Stigmatization associated with mental illness constitutes a significant impediment, which affects its evolution. Programmes based on direct contact have proved to be more efficient in eliminating this stigma, than education and protest campaigns. They also facilitate the empowerment and recovery of those who participate sharing their own experience.

Aims: To reflect about the experience of a person diagnosed of Bipolar Disorder who has participated on an educational programme based on direct contact with people affected by a mental disorder, within a sample group of students in their third year of secondary education.

Methods: An interventional pilot programme is proposed, with longitudinal prospective follow-up, quasi-experimental and with control group. Its efficiency is to be measured on the Patrick Corrigan AQ-C8 scale, in paired samples design at baseline, immediately after the intervention and at 6 months of follow-up.

Results: The breaking down of that social distance, between myself as someone with a diagnosis and my self-esteem, has brought about great changes in my life. It changed my perception of myself (...), gave value to my life experiences, as they ceased to be symptoms and became reasons to reflect. My symptoms became useful for the students, it was helpful to understand the importance of seeking help, how and where look for it. Also changed my perception about adolescents. Once I worked out my own limitations, I saw them as people needed of love, humour and care.

Could be summarized in the following: I have learned a lot about myself, my illness and about others, especially young people. I have taken a bigger step towards understanding what it means to be human and to love.

Conclusions/limitations: The intervention has been a positive experience to self-experts who participated, facilitating their empowerment and diminishing the self-stigma. It is necessary to evaluate the impact of the public exposition with quantitative measures.

References

1. Corrigan PW, Morris S, Larson J, Rafacz J, Wassel A, Michaels P et al (2010) Self-stigma and coming out about one's mental illness. *J Community Psychol* 38(3):259–275
2. Nettle M (2013) Time to Change campaign through the eyes of a service user. Invited commentary on...Evaluation of England's Time to Change programme. *Br J Psychiatry Suppl* 55:s102-s103
3. Davidson L, Chinman M, Sells D, Rowe M (2006) Peer support among adults with serious mental illness: a report from the field. *Schizophr Bull* 32(3):443–450. PubMed PMID: 16461576

PT-033

Comorbidity' profile of children diagnosed with Asperger syndrome or high functioning autism attended in a mental health centre of Gran Canaria

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Autistic Spectrum Disorders (ASD) in general, and Asperger Syndrome (AS) and High Functioning Autism (HFA) in particular, are pervasive developmental disorders that exhibit as the central common deficit, among others, disturbances in terms of social skills, presented since early childhood. This stems in a wide range of consequences in different areas of the subject, which tend to persist in adulthood. It is for this reason that one of the objectives to work with this group of patients is to improve social functioning through social skills instruction.

Psychiatric comorbidity is present in most children with ASD, including those with AS/HAF. According to this, these disorders have been primarily associated with internalizing disorders and attention deficit hyperactivity disorder.

Gresham proposes a system of bidimensional classification of deficits in social skills, which adds the notion of behavioral problems in the sense of comorbid symptoms that interfere with the acquisition or implementation of appropriate social behaviors. This vision has been supported by the literature, pointing that comorbidity affects the outcome of interventions in social skills.

Children diagnosed with Asperger Syndrome or High Functioning Autism attended in our Mental Health Centre were recruited, ranging in age from 7 to 18 years old. A multirater test battery was administered in order to get a wide amount of information from different environments about their behaviors and emotions.

Thus, the behavioral problems and comorbidity profile of the child population affected with Asperger Syndrome or High Functioning Autism who are attended in a Mental Health Unit of the Public Health of Gran Canaria is shown, and possible associations with clinical characteristics.

PT-034

Comparative study, on the health district of Santiago de Compostela, of subjects attending and not attending the mental health unit of adults, who were diagnosed of X code in the mental health unit for children and adolescents

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Introduction: X codes encompass suicides, suicide attempts and parasuicides.

Objectives: Describe the general profile of X codes in the Mental Health Unit for Children and Adolescents (MHUCA) during the years 2000–2012.

Compare the profiles of subjects with a history of X codes who subsequently come and do not go to the Mental Health Unit of Adults (MHUA).

Describe the profile of subjects who continue their assistance in the MHUA.

Materials and methods: Longitudinal descriptive observational study in which X codes were selected exclusively, without any other severe psychiatric pathology, in MHUCA of Santiago de Compostela. For statistical analysis of data was used IBM SPSS Statistics 21 software.

Results: A 1.12 % of diagnoses made in MHUCA correspond to X codes and of these, 19 %, all of them women, continues its assistance MHUA.

The general profile of X code in MHUCA is: girl (93 %), of 14.10 years, which performs a self-poisoning by psychotropic drugs (70.5 %) and which not repeats the autolytic attempt (59.5 %).

The differential profile in subjects attending and not attending the MHUA is determined by: the type of care in MHUCA (hospitalization: 62.5 vs. 38.2 %, psychotherapy and drugs: 37.5 vs. 5.9 %, psychotherapy: 0 vs. 38.2 % and orientation: 0 vs. 17.6 %, respectively), psychiatric family history (100 vs. 58.8 %, respectively) and the use of other drugs (37 vs. 0 %, respectively).

Individuals who continue their assistance in the MHUA are primarily diagnosed of depressive disorders (37.5 %) and personality disorders (37.5 %); it is unknown by 25 % other diagnoses that subjects may have. The 67 % of individuals diagnosed with personality disorders (25 % of those who attend the USMA) are those who repeat the autolytic attempt at adulthood.

None of the study subjects commits suicide.

Conclusions: The general profile of code X in MHUCA is: girl, 14.10 years, who takes psychotropic drugs for poisoning and not repeats the autolytic attempt.

The differential profile in subjects who attending and not for MHUA is determined by: MHUCA type of care, psychiatric family history and other drug use.

Individuals who attend MHUA are primarily diagnosed of depressive and personality disorders, the latter being which repeat the autolytic attempt at adulthood.

PT-035

Concordance between those diagnostics which are referred pediatric patients and those made by the mental health team

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Introduction: Often diagnoses executed in child mental health in a first interview do not agree with those diagnoses which patients have been referred by other health professionals.

In our experience we have observed in our mental health service as formulated above, wondering on more than one occasion if our assumptions were unfounded.

We believe it is important for proper financial management of public health services determine the true incidence and prevalence of various diseases for which different patients are referred to child mental health, and if these are then confirm the first assessment in mental health. It is also important to know the opinion of parents about what “happens to their children”

Objectives: Know the different reasons for referral for mental health patients by other health professionals, and the corresponding correlation with diagnoses made by the team at our Department of Mental Health.

Knowing what kind of professionals are the most that referred patients to our team, and what is the opinion of parents of patients about the area of life of patients who are being affected.

Also know the ages of the various referred patients.

Method: We collected data from 5 professionals in our mental health service; all those new patients were referred by other health professionals, between the months of September to December 2014, gaining 73 surveys.

Our service professionals filled the surveys that were included: patient age, diagnosis, referral, diagnostic impression of mental health professional and the problem area that according to the parents affected patients.

Results: The data show an age range of 2–20 years with certain homogeneity in the dispersion.

Pediatrician referred more patients than the primary care physician.

Regarding diagnostic bypass 26 % of patients were referred for behavioral disorders, 15 % by disorders of Attention Deficit Hyperactivity Disorder, and 14 % for anxiety; other diagnoses were smaller in percentage derivation: low mood and eating behavior disorders.

The main diagnoses made by mental health team in a first consultation were: Adjustment Disorder (26 %), family dysfunction (17 %), anxiety (8 %) and attention deficit disorders and hyperactivity (8 %).

Parents of patients felt that the various areas affected by the situation of their children were: Conduct (35 %), anxiety (19 %) and mood (15 %).

Conclusions: The results show that in most cases referral diagnosis regarding the made by the mental health team do not match; as well not the opinion of parents of patients about which is the area of problem of their children.

PT-036

Description of a programme aimed to Erase mental health stigma targeted to students on secondary school

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Background: Stigmatization associated with mental illness constitutes a significant impediment, which affects its evolution. Programs based on direct contact with people with lived experience have proved to be more efficient in eliminating this stigma, than education and protest campaigns. Young people are a priority target. This program can be a strategy to increase recognition of and help seeking for mental health problems.

Aims: It is pretended to introduce, develop and evaluate an educational programme based on direct contact with people with live experience, within a sample group of adolescents. It would be also presented the audio-visual material starred by the self-experts who participated on it.

Methods: An interventional pilot programme is proposed, with longitudinal prospective follow-up, quasi-experimental and with control group. Its efficiency is to be measured on the P. Corrigan AQ-C8 scale, in paired samples design at baseline, immediately after the intervention and at 6 months of follow-up.

Results: A total of 531 students participated from four state secondary schools in Navarra. Results showed changes on attitudes and a high level of satisfaction from the participants, both self-experts and students.

It is described the structure of the program which consists of two work-shops (55 min each), drawing upon two strategies (contact and education) since a multidimensional perspective including both biologic and environmental aspects.

To facilitate the exportation and avoid bias a video had been recorded (<http://youtu.be/OqcDvmGynRY>).

Conclusions and limitations: The intervention proved to be efficient in the reduction of prejudices, stereotypes and the propensity to show discriminatory behavior immediately after the intervention. It is necessary to evaluate the persistence of these effects in the long term.

References

1. Pinfold V, Thornicroft G, Huxley P, Farmer P (2005) Active ingredients in anti-stigma programmes in mental health. *Int Rev Psychiatry* (Abingdon, England) 17(2):123–131. PubMed PMID: 16194782. Epub 2005/10/01. Eng
2. Pinto-Foltz MD, Logsdon MC, Myers JA (2011) Feasibility, acceptability, and initial efficacy of a knowledge-contact program to reduce mental illness stigma and improve mental health literacy in adolescents. *Soc Sci Med* (1982) 72(12):2011–2019.

PubMed PMID: 21624729. Pubmed Central PMCID: PMC3117936. Epub 2011/06/01. eng

3. Schulze B, Richter-Werling M, Matschinger H, Angermeyer MC (2003) Crazy? So what! Effects of a school project on students' attitudes towards people with schizophrenia. *Acta Psychiatr Scand*, 107(2), 142–150

PT-037

Descriptive analysis of demographic and psychopathological variables in adolescent inpatient unit of hgugm in the last six months 2014. Comparative performance after 14 years

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Introduction and objectives: The Adolescent Unit of the Hospital Universitario Gregorio Marañón is a specific resource for adolescents with high psychopathology risk. We think that the agile and expert handling about complex cases and retention time of an organizational quality system requires continuous evaluation about the work performed and the assisted population. Reevaluate, after 14 years of operation, type of population and income treated in this Unit.

Materials and methods: We are going to collect a database with about 180 patients and nearly 120 variables (gender distribution, middle age, average time, readmissions, diagnosis, reason for admission, treatment, Honosca criteria, etc.) for each patient. Then we are going to analyze data, in a descriptive analysis, of all income of the Adolescent Unit in Hospital General Universitario Gregorio Marañón during the last 6 months of 2014.

Results and conclusions: The data will be presented in plain language and through tables, pie charts and histogram accordingly.

First we want to compare the distribution of income in terms of clinic and sociodemographic characteristics, in relation to the data previously obtained in the period between 2000 and 2010. We suspect found a higher degree of social disadvantage (valued by economic, educational level, school failure, percentage of residential institutionalization, social service intervention, existence of abuse and family psychiatric history). Furthermore, is important for us to compare the average time and the percentage of scheduled admissions to assess the evolution of healthcare organizational capacity and coordination between different resources.

PT-038

Descriptive analysis of the symptomatology and presence of autism spectrum disorders in Spanish institutionalized children

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Background: Institutionalized children are characterized by a complex diagnosis due to their great variety of clinical symptoms. Their weak family bonds in their early childhood may result in attachment problems

(Kay and Green 2013; Minnis et al. 2013). This children are more likely to be considered to have a non-specified autism spectrum disorder (Meltzer et al. 2003; Urizar 2012). A wide group of research confirms that in spite of the different causes (nature and nurture influences) both clinical disorders show similar criteria, especially in social interaction. These children might sometimes be misdiagnosed due to a non-clear differential diagnosis. Cases where difficulties in social interactions persist but do not include restricted interests or stereotypies may be diagnosed as a non-specified spectrum disorder (APA 2013).

Aims of the study: This previous study describes the symptomatology and the diagnosis of children who lived in children's residential homes and attended the Mental Health Center for Children and Adolescents at Mataró Hospital. Furthermore, we analyze the presence of the autism spectrum disorders according to the DSM-5 and their sociability skills.

Method: 53 clinical histories of children attended between the years 2009 and 2014 were reviewed.

Results: The non-specified autism spectrum disorders was the third applied diagnosis category, after mood disorders and ADHD. On the DSM-5 autism spectrum disorders social interaction and communication criteria was found that: 40.5 % of participants had nonverbal alterations behaviors, 83.3 % showed an inability to develop suitable relationships, 57.1 % did not show any spontaneity or interest in sharing, 74.3 % had a lack in emotional and social reciprocity and had affected the awareness of others. Instrumentality, hyper sensibility, restricted interests, stereotypies and rigidity were less numerous. Moreover, low social cognition was detected: having difficulties in self-emotional regulation, less ability identifying or recognizing internal and external emotions, higher inability communicating, expressing or sharing emotional content and lower empathy.

Discussion and conclusions: The attachment disorder diagnosis is almost inexistent, being the non-specified autism spectrum disorder more diagnosed. Although it is not the main reason for consultation, nearly 90 % of the children had problems in social interaction and showed difficulties related with social cognition skills. Lower social cognition is presented in attachment and in autism spectrum disorders (Ibáñez 2013) and so, can be the cause of an inappropriate sociability (Ostler et al. 2010) and the main reason of misdiagnosis (aspects that are the main focus of our following research).

PT-039

Development of a risk score to guide individualized treatment selection in attention-deficit/hyperactivity disorder

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Objectives: This study developed a model for estimating risk scores for treatment failure that could be used to individualize treatment selection in children and adolescents with attention-deficit/hyperactivity disorder (ADHD).

Methods: The study used data from patients with ADHD receiving lisdexamfetamine dimesylate (LDX) (n = 104) or osmotic-release oral system methylphenidate (OROS-MPH) (n = 107) in a Phase 3 randomized clinical trial. Patients in the trial were mostly male (79.1 %) with a mean age of 11 years. On average, the patients had been diagnosed with ADHD for over 2 years with a baseline ADHD Rating Scale IV (ADHD-RS-IV) total score of 40.6. Treatment failure was defined as a <25 % improvement in ADHD-RS-IV total score at Week 7 from baseline. A least absolute shrinkage and selection

operator regression model was used to select baseline characteristics from a list of potential predictors (specifically age, sex, race, body mass index, ADHD subtype, disease duration, comorbidities, prior ADHD pharmacological and behavioural treatment, and disease severity measured by ADHD-RS-IV item scores) for estimating risk scores for OROS-MPH failure. Patients were ranked and stratified (low, medium, high) by their predicted risks of OROS-MPH failure. Treatment outcomes between LDX- and OROS-MPH-treated patients were compared in the overall population and in the high-risk stratum.

Results: A prediction model for OROS-MPH failure was developed and was composed of seven baseline characteristics (age, disease duration and five ADHD-RS-IV items: "Fidgets with hands or feet or squirms", "Has difficulty organizing tasks and activities", "Is 'on the go' or acts as if 'driven by a motor'", "talks excessively", "loses things necessary for tasks or activities"). Among all patients in the study, patients treated with LDX had a 17 % (95 % confidence interval: 7.1 %, 27.8 %) lower treatment failure rate than patients treated with OROS-MPH. Among patients in the stratum with the highest estimated risk of failing OROS-MPH, the difference between LDX and OROS-MPH failure rates increased to 43 %. A similar trend was observed for Clinical Global Impressions—Global Improvement and other efficacy measures with a larger differentiation between LDX and OROS-MPH in patients with a high risk of failing OROS-MPH relative to the overall population.

Conclusions: Using a prediction model, patient subpopulations with more pronounced benefits from LDX versus OROS-MPH were identified in a clinical trial population of children and adolescents with ADHD. The current study illustrates the value and the feasibility of individualizing ADHD treatment.

PT-040

Diagnostic and therapeutic taking in charge of children and adolescents affected by psychopathology and their parents

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As part of the diagnostic and therapeutic approaches to developmental psychopathology, it is fundamental to define the dysfunctional and functional characteristics of the family (the characteristics of the family in which the child/adolescent lives is a strong predictor of mental health) in order to offer them proper and early interventions. Consequently, it is increasingly necessary to use tools to investigate and attend on the role of parental figures, in parallel with the care of the child psychotherapy.

This workshop aims to present different and integrated observational and clinical methods to assess and take care of patients' psychopathology and family interactions during the development age, from infancy to adolescence. Three interventions (following named) have been thought as a way to deeply understand the work with family members by approaching it from the point of view of the both parts: the children (child or adolescent) and the parents.

Observational and clinical methods to assessment child psychopathology and family interactions

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Keywords: Children Psychopathology, Family interaction, Diagnostic Assessment.

Psychopathology in adolescence: the contribution of innovative tools in the clinical work with adolescents and their families.

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Keywords: Adolescent psychopathology, Family interaction, Diagnostic assessment.

Observational and clinical methods in treatment with parents of children and adolescents affected by psychopathology

PT-041

Digital technologies and cyberculture in in-patient psychiatric treatment of adolescents: a technology based therapeutic and pedagogic intervention (Somosa Medialabr)

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Digital and interactive technologies in in-patient psychiatric treatment of adolescents -a technology-based therapeutic and pedagogic intervention (SOMOSA MediaLabR)

Introduction: In the last two decades, the impact of digital and interactive technologies (DITs) on personal and professional life has increased exponentially. Today, the vast majority of the population in industrialized countries uses DIT on a daily basis as their main source of information and as a crucial platform for social exchange. In the near future, body-attached devices will constantly provide the user with data of the world around and within him. Innovative DITs seem to offer endless possibilities. However, DITs also influence the manifestation and course of mental illnesses—especially in media-interested children and adolescents with Attention Deficit and Hyperactivity Disorder (ADHD), Posttraumatic Stress Disorder (PTSD), Autism Spectrum Disorder (ASS), and other conditions. Their specific usage of the web 2.0, of interactive games, and of social media often reflects the underlying disorder and has to be understood and treated in this context.

Methods: A working group consisting of neuropsychologists, clinical psychologists, pedagogic experts, a professional game–tester and adolescent psychiatrists developed the SOMOSA MediaLabR concept. It includes a real life office simulation setting, in-depth neuropsychological testing, a set of adequate computer games, specifically tailored for the individual patient, virtual reality techniques, creative software programs, a high-end music recording and producing facility, and the possibility to optimize and critically reflect the social media behavior of the patients preparing personalized websites and social media appearances.

Results: The first phase of the implementation of the SOMOSA MediaLabR program in the clinical context integrated patients with ASS, PTSD, and hyper-impulsivity due to ADHD or dissocial developments. The modular concept and the individualized set of methods of DITs provided a well-accepted and personalized approach. The adolescents were in very close cooperation with the professional team to ameliorate the concept.

Discussion: As adolescents with severe and comorbid mental disorders show specific problems in age- and content adequate usage of electronic media of all kinds, we advocate an intensified integration of DITs in inpatient therapeutic institutions for children and adolescents. The SOMOSA MediaLabR concept might constitute a promising first step towards the integration of DITs in multisystemic therapy in this age group.

PT-042

Disruptive mood dysregulation disorder and pediatric bipolar disorder. Sleep and attention

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Introduction: Some studies link Pediatric Bipolar Disorder (PBD) with alterations in REM sleep and in turn, some others, its variables associated with attentional capacity. Hypothesis: PBD group will present a greater involvement of REM sleep and attentional capacity than the Disruptive Mood Dysregulation Disorder (DMDD) group. Objectives: Study sleep variables in children with PBD and DMDD and its relation with neuropsychological variables.

Method: Participants: 8 outpatients (PBD type I, $n = 5$; DMDD, $n = 3$). Instruments: Child Depression Inventory (CDI), Child Mania Rating Scale (CMRS), State-Trait Anxiety Inventory for Children (STAIC), Sleep Diary, Sleep Disturbance Scale for Children (SDSC), Nocturnal Polysomnography (NPSG) (REM Latency (REMLat) and REM density (REMd) variables), Wechsler Intelligence Scale for Children-Fourth Edition (WISC-IV) to <16 years and Wechsler Intelligence Scale for Adults (WAIS III) in older and d2 test of Attention. Procedure: Schedule for Affective Disorders and Schizophrenia Present and Lifetime Version (K-SADS-PL) to establish diagnosis and comorbidities. SMD Module K-SADS-PL and DMDD operationalization were used for DMDD diagnosis.

Analysis: Sample descriptive analysis was performed. We proceeded to the mean comparison analysis (Mann-Whitney U test) and significant results ($p < 0.05$) were studied.

Results: Regardless the group they belonged, there was a positive correlation ($p = 0.010$) between REMLat and omissions ($r = 0.958$) and a negative correlation ($p = 0.0037$) between REMd and variability ($r = -0.839$).

Conclusions: REM sleep could be related to attentional capacity.

Limitations: Neither the pharmacological effect or comorbidity could be controlled. It is necessary to include a healthy control group and increase the sample.

PT-043

Early communication in Serbian speaking children with 22q11.2 deletion syndrome

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Abstract: The 22q11.2 deletion syndrome (22q11.2DS) or velocardiofacial syndrome (VCFS) is among the most clinically variable syndromes. Commonly includes cardiac defect, characteristic facial appearance, thymic hypoplasia, cleft palate/velopharyngeal insufficiency (VPI), hypoparathyroidism with hypocalcaemia, feeding

difficulties, speech and language impairment and developmental delay.

This syndrome, with an estimated incidence of approximately 1/4000 per live births, is caused by an autosomal dominant heterozygous microdeletion of the q11.2 band of chromosome 22.

As a part of a multidisciplinary study we examined the speech and language abilities in a two groups of patients: experimental group (E group) consisted of three patients with 22q11.2 microdeletion and control group (C group) consisted of three patients having a phenotype resembling 22q11.2DS but without microdeletion. All examined children were between 6–36 months of age and they were monolingual native speakers of Serbian. Patients were included in the study based on the presence of at least two (congenital heart malformation and one more) of the five major characteristics of the 22q11.2DS (congenital heart malformation, facial dysmorphism, hypocalcemia, T-cell immunodeficiency and cleft palate). The presence or absence of 22q11.2 microdeletion was revealed by fluorescence in situ hybridization (FISH) and/or multiplex ligation-dependent probe amplification (MLPA). Also, the purpose for this research was to explore the correlation between the molecular characteristics of the deletion and speech language, sensorimotoric emotional, cognitive and psychiatric manifestations in the patients.

Children in Group E at the age of 6–36 months, showed a delay in the appearance of the first functional words than children from Group C. Two children in Group E have not yet spoken (the appearance of the first functional words with meaning) and one child from the same group pronounced his first real word at the age of 20 months, while all the children Group C already pronounced his first word with meaning. Children with 22q11.2DS should be put in “established risk” category and therefore language treatment should begin in early infancy to ensure that these children will develop the prelinguistic skills necessary to support language. Therefore, according to the principles of evidence based practice, it would be efficacious for the speech therapist and pathologist to work with the family from the time when the child is born to try to minimize this effect as much as possible.

Keywords: 22q11 deletion syndrome, Speech impairment, Speech and Language treatment.

PT-044

Effect of parental variables on psychological difficulties of gifted children

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Despite some of the studies on the gifted children indicated that these children have more emotional difficulties, lately, there is an increasing consensus on the idea that these children don't experience more difficulties than normal children. However, studies showed that gifted children have some vulnerabilities such as perfectionism, intense sensitivity and unsynchronized emotional-physical and mental development. In addition studies indicated that their parents have some characteristics such as unrealistic expectations and over involvement. It is thought that these factors are posing a risk for gifted children to develop behavioral and emotional problems.

Objectives: The aim of this study is to determine whether the effect of parental variables on psychological difficulties of gifted children is more than that of non-gifted children.

Method: Participants (Sample): 158 Turkish gifted and 214 non-gifted children aged between 8 and 12 participated.

Measures: The Parenting Scale (PS), Child Parental Acceptance-Rejection Questionnaire/Control Mother-Father (Short Form) (Child PARQ/Control M-F (SF), The Strengths and Difficulties Questionnaire (SDQ) and a demographic form were used in this study.

Results: Regression analysis results showed that perceived parental acceptance-rejection and the parental styles have more predictive power in psychological difficulties of gifted children than that of non-gifted children.

Discussion: The results can be explained by sensitivity of gifted children to the environment.

Keywords: Gifted child, Parenting, Parental acceptance-rejection, Psychological difficulties.

Institutions: Ege University in Turkey

PT-045

Effectiveness of dialectical behavior therapy in depressive symptoms in multi-problem adolescents

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Introduction:

Dialectical behavior therapy for adolescents (DBT-A) was initiated as a treatment for suicidal outpatients. Afterwards it was adapted to many different diagnoses.

DBT-A program in Basurtós University Hospital is a psychotherapeutic treatment that targets high risk multiproblem and multidagnosis adolescents.

Patients who participate have impulsivity, emotional instability, interpersonal and conduct problems. Although major depression is not the mean diagnose many of adolescents reflect symptoms of depression and anxiety which aggravate their outcome.

Aims: To study the presence of depression symptoms in an adolescent sample who participate in DBT-A program.

To analyze effectiveness of DBT in treatment of comorbid depression symptoms in multi-problem adolescents.

Methods: A sample of 89 adolescents psychiatric outpatients were included in DBT-A program (January 2010–December 2014). Sociodemographic data, clinical diagnoses, and psychiatric and substance abuse history from patients and family were collected. Achenbach questionnaires CBCL (Child Behavior Checklist) for parents, YSR (Youth Self Report) for patients) and CDI (Children's Depression Inventory) were administered in the beginning and at the end of the therapy. We use SPSS v21 for statistical analysis (Chi square test, Student's t-test, Mc Nemar)

Results: CDI scale demonstrated a significant decrease in average scores from 21.75 to 16 (p 0.022). Percentage of patients with positive scores for depression suffers an important reduction (p 0.014) There is a decrease in withdrawn behavior in YSR (p 0.009) and CBCL (p 0.000).

There is a decrease in average score for depression and anxiety in adolescents and parents report (p 0.002, p 0.000).

The percentage of patients with positive scores for depression and anxiety decreased significantly as patients (p 0.021) and parents (p 0.012) reported.

Internalizing problems present a global improvement with the decrease of the average scores in patient titration (p 0.002). Also there is a decreased of the percentage of patients with positive scores for the internalizing symptoms (p 0.016). In parents report exits a decrease in

average scores (p 0.000) and in the percentage of pathological scores (p 0.031).

There are no significant differences in the scores of somatization symptoms after the intervention

Psychiatric admissions were reduced from an average of 1.41 to 0.48 (p 0.000).

Conclusions:

- Depression and anxiety are common symptoms in high risk multidagnosis adolescent samples.
- DBT- A is effective in the treatment of comorbid depression symptoms in multiproblem patients in which affective pathology is not the main diagnosis.

Keywords: Dialectical behavior therapy, Adolescents, Depression.

PT-046

Effectiveness of psychotherapeutic intervention in a children and youth day hospital in a specialized child and adolescent psychiatric unit in Southern Spain

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Introduction, main objectives and methods: The treatment in Day Hospital has become in recent years one of the main forms of intervention for children and adolescents with serious psychopathological disorders.

The Integral Mental Health Plan of Andalusia (“Plan Integral de Salud Mental de Andalucía”, Andalusia Public Health System, 2003) defined Day Hospital’s care as an intermediate device that is part of the Units of Mental Health of Children and Adolescents whose purpose is to provide intensive treatment for severe mental disorders that appear in childhood and adolescence.

It is characterized by offering individualized care and it is adapted to the needs of the child or adolescent between 0 and 18 years old.

It is a very adequate form of treatment for serious diseases and crises, to reduce symptoms and improve functioning of children and adolescents with relational difficulties or lack of social skills. The treatment includes activities for observation and diagnostic workup, with a therapeutic space for truancy cases secondary to mental disorder, observation and supporting social isolation within the family and social relationships, patients with chronic conditions or who have not responded to other treatments on an outpatient basis.

Results and conclusions: In the Unit of Mental Health of Children and Adolescents of Valme’s Hospital (Seville), this kind of treatment has been applied for 10 years with very positive results. There are three groups of children and adolescents divided by age, with heterogeneous pathologies and gender, and two kinds of treatment regime (intensive or partial).

It is difficult to quantify accurately or statistically the results, so we rely on descriptive analysis through interviews and review of medical records. In conclusion we note that the child and adolescent Day Hospital is a treatment modality that leads to a significant reduction in symptoms of youth people, a greater parent satisfaction, and improvements in clinical, academic and family areas.

PT-047

Effects of atomoxetine and OROS-MPHON executive functions in patients with combined type attention deficit hyperactivity disorder

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Introduction: ADHD is a syndrome characterized by inattention, distractibility, hyperactivity, impulsivity and impaired executive functions. ADHD, the most common neurobehavioral disorder in school age children, negatively affects normal development as well as academic and social functionality (Spetic and Arnold 2007). It has been reported that ADHD incidence is 3–5 % in school age children and that ADHD symptoms persist in adulthood 30–50 % of children with ADHD (Biederman et al. 1996, Polanczyk et al. 2007).

Stimulants and a non-stimulant agent ATX are preferred in the treatment of ADHD. Although the mechanism of action of OROS-MPH, a psychostimulant, has not been fully elucidated, it is thought that OROS-MPH exerts its effects by inhibiting dopamine reuptake at the prefrontal cortex and striatum; thus, elevating dopamine level in the presynaptic area (Kimko et al. 1999). OROS-MPH is a long-acting, slow-release methylphenidate, which has a pharmacokinetic profile providing controlled methylphenidate release by using osmotic pressure (Swanson et al. 2002). ATX is a selective inhibitor of the presynaptic norepinephrine transporter at the prefrontal cortex. It also has affinity to serotonin and dopamine transporters (Unni 2006). ATX exerts its effects by increasing dopamine and noradrenalin levels through the inhibition of presynaptic norepinephrine transporters, particularly those at the prefrontal cortex (Zhou 2004).

In previous studies, it was seen that drug therapy could eradicate clinical symptoms but similar effects could not be achieved regarding mental processes. Today, the resolution of clinical symptoms alone is not considered as sufficient and it is necessary to enhance the patient’s functionality and to optimize quality of life (Karakas 2011). In the literature, there are studies indicating that methylphenidate and ATX have positive effects on executive functions (Adler et al. 2014, Konrad et al. 2004, Konrad et al. 2005, Riccio et al. 2001); however, comparative studies are limited (Yang et al. 2012, Yildiz et al. 2011). In addition, the time criterion was taken into account in these studies, in which the tests were repeated after the completion of the planned time period.

In this study, the functional capabilities of the patients who clinically responded well to therapy were assessed simultaneously with clinical response that may appear at different time periods and the treatment groups were compared in patients who responded to therapy by excluding patients with insufficient clinical response.

Methods: The study sample consisted of 43 children aged 7–12 years who presented to the outpatient clinic and were diagnosed as combined type ADHD according to DSM-IV criteria. The Wisconsin Card Sorting Test (WCST), Stroop Test TBAG Form (STP) and Visual Auditory Digit Span B (VADS B) were applied to all the patients included. Neuropsychological tests were repeated in 33 patients with good clinical recovery based on CGI scale ($\text{CGI-I} \leq 2$) at the week in which clinical recovery was observed.

Findings: Ten of 43 patients failed to complete the study due to various reasons (adverse effects, unresponsiveness to treatment). Overall 33 patients (16 patients from the ATX group and 17 patients from the OROS-MPH group) completed the study.

Response rate was found to be 76.19 % (16/21) in the ATX group whereas it was 77.27 % (17/22) in the OROS-MPH group. According to the CGI-I scale, time to good clinical response ($\text{CGI-I} \leq 2$) was 13 weeks for ATX whereas it was 7 weeks for OROS-MPH ($p < 0.01$) (Table 1). Adverse effects were observed in 57.14 % of the patients in the ATX group whereas they were observed in 54.54 % of the patients in the OROS-MPH group. The most common adverse effects were nausea, loss of appetite and abdominal pain in the ATX group whereas loss of appetite, abdominal pain and irritability were the most common adverse effects in the OROS-MPH group.

When the treatment groups were compared regarding pre-treatment tests, the only significant difference was detected in the time score of the Stroop test Part 3 ($p = 0.034$). No significant difference was detected in the other scores of the Stroop test, WCST and VADS B tests between groups ($p > 0.05$).

Discussion: Although there are comparative studies regarding the treatment effectiveness of ATX and psychostimulant agents, comparative data are limited regarding executive functions. In the present study, we aimed to evaluate and compare the effects on executive functions, activity, treatment response time and adverse effects of ATX and OROS-MPH therapy, the most commonly used agents in ADHD, based on discernible clinical effects.

In this study, although no selection was made regarding gender in the study sample, a relatively well-defined, uniform study sample including children with a comparable symptom profile could be achieved by selecting patients with combined type ADHD and those with CGI-S score < 4 . In addition, lack of a significant difference in all 3 tests other than a subscore (Stroop Part3 time score) when the test results of the 2 groups were compared before treatment showed that the groups were homogenous and comparable.

Although treatment response time was different for each patient, it was 13 weeks for ATX and 7 weeks for methylphenidate. In the present study, optimum dose titration time was about 4–6 weeks. When effectiveness of therapy was considered, 16 (76.19 %) of 21 patients in the ATX group and 17 (77.27 %) of 22 patients in the OROS-MPH group responded to therapy and no significant difference was detected between the two groups regarding efficiency. In a double-blinded, placebo-controlled study by Newcorn et al. (Newcorn et al. 2008), it was found that the response rates to OROS-MPH (56 %) and ATX (45 %) were significantly higher than those to a placebo while the response rate of OROS-MPH was also higher than that of ATX (Newcorn et al. 2008). As in our study, in a comparative study in 228 children and adolescents by Kratochvil et al., it was found that the mean baseline ADHD RS-IV scores were 39.3 in the ATX group and 37.6 in the methylphenidate group, while they were 20.0 and 19.8 at the end of week 10, respectively. However, no significant difference was detected in ADHD RS-IV scores among the groups (Kratochvil et al. 2002). In our study, it is thought that the higher response rate and similar levels of effectiveness could be attributed to prolonged follow-up period (20 weeks), exclusion of patients with comorbid diseases, inclusion of patients with combined type ADHD alone and patients with high clinical severity of ADHD ($\text{CGI-S} \geq 4$).

When clinical response time was considered, it was found that OROS-MPH had a shorter response time compared to ATX ($p < 0.001$). It was seen that OROS-MPH had apparent superiority regarding response time; however, there was sustainability throughout the day in terms of recovery in executive functions with ATX while it is difficult to suggest such sustainability in OROS-MPH.

Both agents were well-tolerated by patients without withdrawal symptoms although adverse effects were observed in 57.14 % of the patients in the ATX group and in 54.54 % of the patients in the OROS-MPH group. The drug withdrawal rates were found to be similar between groups (9.52 % for ATX vs. 13.63 % for OROS-

MPH). These rates were in agreement with the drug withdrawal rates reported in a comparative study by Kratochvil et al. (Kratochvil et al. 2002). The most common adverse effects were found to be nausea and loss of appetite in the ATX group whereas loss of appetite was the most common adverse effect in the OROS-MPH group. These results are in agreement with those reported in studies on ATX and methylphenidate (Michelson et al. 2002, Weiss et al. 2005).

Executive function described as maintaining an appropriate problem solving set are among the measurable neurocognitive abilities. Measurement of executive functions can be performed in various domains including set shifting and maintenance, planning, contextual memory, inhibition, integration across place and time, fluency and working memory (Pennington and Ozonoff 1996). WCST is considered as the gold standard for measurement of executive functions (Royall et al. 2002). The test measures conceptualization and abstract reasoning, working memory, set shifting, attention and perseverative tendency. Perseveration measured in WCST is associated with continually giving the same answer despite knowing that it is wrong (Karakas and Dinçer 2011). Perseverative error is one of the most important markers of neuropsychological deficits in ADHD (Nigg 2005). In a review of studies using WCST in children with ADHD, it was reported that ADHD groups achieved lower scores than controls in 17 of 26 studies (Sergeant et al. 2002). In general, the first 8 WCST scores measure perseverative tendency, while scores 3, 10 and 12 measure conceptual learning and abstract reasoning (Karakas and Dinçer 2011). In a study comparing the effects of OROS-MPH and ATX by using WCST, it was reported that there was recovery in 2 domains in the ATX group and in 3 domains in the OROS-MPH group in the tests 12 sub-scores and that OROS-MPH therapy was superior in perseverative errors (Yildiz et al. 2011). In our study, significantly increased performance was detected in 10 sub-scores in the OROS-MPH group, while it was detected in 7 sub-scores in the ATX group. This indicates that OROS-MPH is superior in both perseveration and conceptual learning and abstract reasoning. In our study, increased performance in more domains could be due to the fact that only patients with clinical response were included in the study.

The Stroop test measures selective attention, focused attention and attention control/response to interference by various subtests (MacLeod 1991). In addition, it has been reported that the Stroop test is the gold standard for measuring attention (Karakas and Dinçer 2011). In many studies using the Stroop test, it was found that it is a sensitive test for ADHD and those children with ADHD exhibit low performance in this test (Barkley 1997). The interference score in this test has been used in ADHD studies (Van Mourik et al. 2005). In one of two studies comparing OROS-MPH and ATX in children with ADHD by using the Stroop test, it was suggested that OROS-MPH was superior in interference control, while it was suggested that both agents had similar effects on interference control in the other study (Yang et al. 2012, Yildiz et al. 2011). In our study, significant improvement was recorded in interference control in both groups. This finding showed that the attention control performances of the patients in both groups were significantly increased against distractors. Another interesting issue was that no error was encountered in any domain other than interference in patients with ADHD. Thus, one could not suggest a disorder in the error domain in patients with ADHD. The difference in this test should be interpreted as shortening of test completion times without error. From this perspective, it was seen that the ATX group had markedly shorter test completion times and achieved better results compared to the OROS-MPH group.

In children with ADHD, difficulties in selective attention and maintaining attention result in short-term memory disorder. VADS B is a neuropsychological tool used in measuring short-term memory,

sequencing, sensorimotor integration, attention and concentration. In ADHD, inattention during recognition and perception of peripheral stimulants also impairs the transfer of stimulant into short-term memory.

In this study, a significant performance increase was achieved with treatment in short-term memory, attention and concentration as measured by VADS B in both treatment groups; however, ATX was associated with performance increase in more domains. No improvement was observed in in-sense integration, or in the auditory, verbal and written domains with OROS-MPH therapy while performance increase was observed in the ATX group.

Keywords: Attention deficit hyperactivity disorder, OROS-MPH, Atomoxetine, Executive functions, Child.

PT-048

Effects of cognitive remediation therapy on mental flexibility in children with autism spectrum disorder

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Introduction: Autism spectrum disorder (ASD) is known to be associated with cognitive dysfunction, involving mainly cognitive flexibility. This impairment has an impact on academic difficulties and represents one of the treatment targets. Cognitive remediation therapy (CRT) attempts to improve cognitive deficits by teaching information processing strategies through guided mental exercises.

Objectives: The aim of this study is to investigate whether CRT, a new psychological treatment, improves mental flexibility in children with autism spectrum disorder.

Keywords: Autism spectrum disorder, Cognitive flexibility, Cognitive remediation therapy.

Methods: Children meeting the Diagnostic and Statistical Manual for Mental Disorders (DSM-5) criteria for ASD, and following a regular school curriculum were recruited from clinical population at the Child and Adolescent Psychiatry Department in Razi University Hospital—Manouba—Tunisia. The intervention was individual CRT, delivered over a period of 6 months with one 45-min session per week. The main outcome measure is cognitive flexibility, assessed using verbal and semantic fluency. Patients were to achieve category (animals, clothes) and letter (m) fluency tasks, delivered in 2 min. A credit of one point was given for each correct response.

This outcome was measured at baseline and 1 week after completion of the treatment.

Results: Twenty patients were included. The mean age was 10.38 (ranging from 6 to 21). There was one drop out because of behavioral disorders (aggressivity). Eight patients (seven males and one female) achieved the program, but two patients did not come for assessment after completion of CRT. For the seven other patients, the mean score in “animals” category was 13.16 before CRT and 14 after it. Concerning the “clothes” category, the mean score increased from 8.66 to 9.5 after completion of the program. Higher scores of phonemic fluency (4.75) were also found after CRT in comparison with baseline mean scores (1.5).

Conclusion: The findings provide support for the effectiveness of CRT for enhancing cognitive flexibility. And in order to achieve generalization of the CRT effects to daily functioning, mainly in school performance, it is necessary to include CRT in broader programs in conjunction with other psychosocial interventions.

PT-049

Effects of cognitive remediation therapy on school results in children with autism spectrum disorder

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Introduction: Despite the recent changes in medications used to treat symptoms of autism spectrum disorder (ASD), the outcome in terms of quality of life and skills remains poor. One possible explanation is that skills and school performance are associated less with symptoms than with executive dysfunction. Cognitive Remediation Therapy (CRT) is a new psychological treatment, aiming to improve executive function, compensation and coping skills.

Objectives: This study examined the effectiveness of CRT for improving school results in children with ASD.

Keywords: Autism spectrum disorder, School results, Cognitive remediation therapy.

Methods: Children meeting the Diagnostic and Statistical Manual for Mental Disorders (DSM-5) criteria for ASD, and following a regular school curriculum were recruited from clinical population at the Child and Adolescent Psychiatry Department in Razi University Hospital—Manouba—Tunisia. Patients received individual exercises for flexibility, memory and planning, delivered over a period of 6 months with one 45-min session per week. The main outcome measure is school performance, assessed by school results. Flexibility was assessed by verbal fluency, and working memory by digit-span task. These outcomes were measured at baseline and after completion of the treatment.

Results: Twenty patients were included. The mean age was 10.38 (ranging from 6 to 21). There was one drop out because of behavioral disorders (aggressivity). Eight patients (seven males and one female) achieved the program, but two patients did not come for assessment after completion of CRT. The six other patients improved their school results, as emphasized by parents and teachers. Higher grades involved mainly sciences, which require sustained attention and reasoning. As for neuropsychological assessments, results showed improvement in verbal fluency: in fact, the mean score in “animals” category was 13.16 before CRT and 14 after it. Concerning the “clothes” category, the mean score increased from 8.66 to 9.5 after completion of the program. Higher scores of phonemic fluency (4.75) were also found after CRT in comparison with baseline mean scores (1.5). Moreover, children improved their working memory assessed by the digit-span task.

Conclusion: The target of CRT is to improve functioning, and then adjunctive therapy is essential, with the best effects being shown when a more strategic cognitive remediation approach is adopted.

PT-050

Effects of methylenetetrahydrofolate reductase (MTHFR) deficiency on psychopathology in children and adolescents

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Object: Recent studies showed that genetic polymorphism of 5,10-methylenetetrahydrofolate reductase (MTHFR) is related to many neuropsychiatric disease. While most of these studies have been carried out in adults, studies in children are not sufficient. The aim of the present study was to evaluate a possible association between MTHFR gene polymorphisms and the presence of psychopathology in the context of neurocognitive associates in children and adolescents.

Method: This descriptive study involved newly diagnosed, voluntarily admitted children aged 7–17 from Department of Pediatric Metabolic Diseases. Mutations in the MTHFR gene were investigated using polymerase chain reactions. The level of Hcy, B12, folate and mutation in MTHFR gene were determined. For the behavioral parameters, participants were evaluated with Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (KSADS), Wechsler Intelligence Scales for Children-Revised (WISC-R), Conners' Rating Scales-Revised Teacher and Parent Version, Behavior Rating Inventory of Executive Function (BRIEF), Children's Depression Inventory, Screen for Child Anxiety Related Emotional Disorders, Harris Test of Lateral Dominance, Line Orientation Test, and Verbal Fluency Test (VFT).

Results: The study group consisted of 29 children and adolescents. The mean age was 11.94 ± 3.58 years (age range between 6.41 and 17.33 years). Females (62.1 %) outnumbered males. The results of WISC-R showed that Intelligent Quotient (IQ) scores were: Superior IQ (17.2 %), average IQ (34.5 %), lower than average (48.3 %) (27.6 % low average intellectual functioning, 20.7 % Mild Mental Retardation). Of all the participants; 72.4 % had at least one psychiatric diagnosis. The most common psychopathology was Attention Deficit Hyperactivity Disorder (58.6 %). Rest of participants's psychiatric diagnoses were distributed as Social Fobia (24.13 %), Generalized Anxiety Disorder (24.13 %), and Oppositional Defiant Disorder (20.68 %). Marfanoid appearance was observed on 5 subjects (17.24 %). The most common type of MTHFR gene polymorphisms was A1298C Heterozygot (45.8 %).

Conclusions: Overall, our results support an interaction between genetic polymorphism of MTHFR and higher incidence of developmental neuropsychiatric disorders than general population. We can make an inference from this study that patients with MTHFR deficiency might have high risk for certain psychopathology. This morbidity effect may be prevented by earlier diagnosis and interventions.

PT-051

Electroconvulsive therapy in the adolescents unit of gregorio Marañón hospital (Madrid, Spain). Case series

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Introduction: Electroconvulsive therapy (ECT) is a safe and effective treatment widely used in adults, but its use in young population is still rare (Ghaziuddin N, 2004; Shoirah H, 2011). There is little experience with ECT within psychiatrists who attend young patients, and access to this kind of treatment is very restricted.

Objectives: To carry out a descriptive research in young patients with severe mental illness treated with ECT in the Adolescents' Unit of the University Hospital Gregorio Marañón.

Methods: We screened out all hospital admissions to the Adolescents' Unit during the last 10 years (between 2005 and 2014), and included all cases that required ECT. Patient's medical charts were analyzed and used as the data source.

Results: Seven adolescents of 15.85 ± 1.33 years old, were treated with ECT within the 10-year period. In all cases, either two independent psychiatrists recommended ECT or the decision was made after presenting the case in a clinical meeting. Indications of ECT were a poor response to medication, catatonia, persistent suicidal ideation and/or aggressiveness, or psychomotor agitation uncontrollable by other means. The most popular indication in our sample was poor response to pharmacological treatment in (71.42 %) of the patients, followed by catatonia (28.57 %). Five out of seven patients included were diagnosed with schizophrenia, and two with bipolar disorder. The average number of ECT sessions was 12.57 (6–26). 14.28 % of patients suffered from self-limited complications during treatment (prolonged convulsions and cardiac arrhythmia). All patients were being treated with antipsychotics meanwhile (42.85 % also took a mood stabilizer).

Conclusions: In this chart review we found that ECT was a useful treatment in adolescents with severe mental illness where previous treatments had failed or when life was at risk. Most patients included had a diagnosis of schizophrenia, although affective disorders are the most frequent cause of ECT recommendation in the literature (Ghaziuddin N, 2004). First steps have been taken to create a national ECT register in adolescent population and a protocol has been developed to guarantee quality in the administration of ECT in our Unit. Given the paucity of data on effectiveness of ECT in adolescent population, collaborative research at an European level is warranted.

PT-052

Enhancing therapeutic alliance with children and families in intercultural mental health care

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Public services, as Medical and Psychological Centres (CMP) provide substantial parts of Mental Health Care for Children and Adolescents in France. They play a central role in evaluation of psychic or developmental problems; provide counselling and therapies in different clinical settings, educational support and a certain number of other multi-professional interventions. Professionals also cooperate with families and school-teams in order to facilitate communication and to find a deeper understanding of the child's difficulties.

In Toulouse, as in many larger cities in France, the profile of the consulting families is undergoing profound changes, with increasing cultural diversity and a growing number of immigrant populations who require specific culturally sensitive interventions. Lack of cultural sensitivity results in weak therapeutic alliances with the families. As therapeutic alliance has proved to be a good indicator for efficiency in psychotherapeutic interventions in adult and child mental health care it seems necessary to find ways to overcome these difficulties.

For this purpose, a specific setting of intervention has been created at the Hospital "la Grave" at Toulouse in 2013. We propose short-term interventions in intercultural situations where the construction of a therapeutic alliance seems difficult. First, these situations are dis-

cussed within the team, and possible strategies of overcoming difficulties are explored. If needed, a short-term intercultural exploration of existing obstacles to mutual understanding is proposed.

In order to evaluate changes provoked by these innovations, we started mixed-methods evaluation program in September 2014, including interviews with team-members, measurement of therapeutic alliance and analysis of filmed therapy sessions. In our communication we will present and discuss first results of the qualitative part of our study, concerning the interviews with team-members: psychiatrists, psychotherapists and other members of the CMP team. Using a grounded theory methodology, we conceptualise the topics team-members evoke, exploring their perception of existing obstacles to therapeutic alliance in intercultural situations; their evaluation of effectiveness of our intercultural setting and their understanding of core-factors leading to positive change in therapeutic alliance in intercultural situations.

Keywords: Therapeutic Alliance, Child Mental Health Care, Transcultural psychiatry, Intercultural psychology.

PT-053

Environmental factors associated with suspected ADHD in preschoolers using a screening tool (ADHD-RS-IV-P)

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Introduction: ADHD is a neurodevelopmental disorder usually first diagnosed in school-age children, but symptoms frequently start in preschoolers. Its etiology is complex and involves both genetic and environmental factors.

Objective: The goal is to estimate the association between prenatal, perinatal and postnatal environmental factors and suspected ADHD in a large preschooler population.

Methods: From sample of children 3 to <7 years old both teachers and parents filled the ADHD-RS-IV-Preschool version as a screening tool. We chose the 93rd percentile in the ADHS-RS-IV-P in inattention, hyperactivity/impulsivity and total score as threshold cut-off points for “suspected ADHD”. Parents also filled a questionnaire about prenatal, perinatal and postnatal factors. To evaluate the association between factors and suspected ADHD we used a Chi square analysis.

Results: We evaluated of 1426 children (49.6 % males) in schools in Navarra and La Rioja. The average age 4.70 (IC95 % 4.65–4.74) years old. Prevalence of “Suspected ADHD” was 3.8 % (IC95 % 2.7–4.8).

As far as environmental factors, only nicotine use during pregnancy was associated with suspected ADHD ($p = 0.015$). Other factors were not significant (Low birth weight, fetal distress, prematurity, need for incubator and alcohol consumption during pregnancy). Suspected ADHD was also associated with familiar history of ADHD ($p = 0.008$).

Discussion: ADHD prevalence in our preschool epidemiological sample is similar to that published internationally. ADHD is commonly diagnosed at age older than 7 years old. At this age, ADHD is associated with environmental factor as tobacco consumption during pregnancy or low birth weight. In our sample we could see that suspect of ADHD at preschooler age is associates with tobacco consumption too. The familiar history of ADHD is also associated, which highlight the value of genetic factors in ADHD disorder.

Our results indicate that assessment and prevention of ADHD could be started at preschooler age (before 7 years old). The suspect ADHD at this age is associated to environmental factors and familiar history like other developmental ages. More epidemiological studies are needed to replicate these results.

PT-054

Epidemiological research of autism in children aged 3 to 14 years living in the Republic of Belarus

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Clear information about the prevalence of autism among children varies: according to F. Volkmar and A. Klin (2000)—from 0.7 to 21.1 per 10,000 children, according to C. Gillberg (2004)—50–100 per 10,000.

The true prevalence of autism in the Republic of Belarus is difficult to determine because of features of approaches to the diagnosis of “autism” and collecting statistical information.

Object: To study the epidemiological characteristics of autism in children aged 3 to 14 years living in the Republic of Belarus.

Materials and methods: Information about prevalence, structure and frequency of occurrence of autism in children aged 3 to 14 years was obtained by screening of the child population in Minsk and Minsk region. Each case of established diagnosis of “autism” was analyzed in accordance with the diagnostic criteria of ICD-10’s rubric—F84. To obtain the necessary information we used: the method of accounting cases for appealability into the territorial health care institutions using information from medical documentation, the method of continuous observations of all children with autism.

The overall morbidity of autism in Minsk in 2011 was 5.4 cases per 10,000 children population. This figure is three times higher than in 2008 (1.7 cases per 10,000 child population). From 2005 to 2012 the total number of children with autism increased 2.8 times (from 251 to 699 cases). 786 children autism was registered in 2013. The increase in morbidity observed in all the regions of the country and the city of Minsk.

PT-055

Epidemiology of autism spectrum disorder and attention deficit hyperactivity disorder in a community-based population sample of five-year-olds children

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Background and Aims: In Japan, local governments are performing pregnant infants health checkup as fundamental maternal-and-child-health service. However, that cannot be diagnosing developmental diseases, such as ASD. Furthermore, it is increased that undiagnosed children fall into secondary obstacle because of maladjustment after entering school. So, we underwent five-year-olds health checkup in cooperation with a city, aimed to help early diagnosis and early intervention. We report the prevalence and comorbidity of ASD and ADHD in DSM-5 criteria, and the difference of clinical data between ASD, ADHD and healthy control in a community-based population sample of five-year-olds children.

Methods: Subjects are 954/1310 children to become 5-year-old in April 2012 to March 2013. After primary screening (ASSQ, ADHD-RS, SDQ and DCDQ evaluated by parents) was performed, 226 secondly developmental health examination subjects were selected. Finally 159 children and their parents participated the examination. They completed questionnaires (AQ, Conners-3, PSI and CSHQ) evaluated by

parents and we examined their intelligence and motor function by WISC-4 and M-ABC2 excepting severe developmental disorder. After examination, a pediatrician and psychiatrists diagnosed neurodevelopmental disorder using DSM-5 criteria. We calculated the prevalence and comorbidity of ASD and ADHD. Clinical data were statistically analyzed by multiple comparisons with Bonferroni correlation between ASD, ADHD and healthy control groups.

Results: 29 children were diagnosed as ASD. The prevalence of ASD was 3.04 % (95 % confidence interval: 1.95–4.13) and the comorbidities of ASD were ADHD (41.4 %) and ID (41.4 %). 30 children were ADHD only. They didn't have any comorbidity. 20/29 ASDs had not been diagnosed with ASD until this health checkup. Furthermore, the utilization of support systems in ADHDs was only 3.4 %. Mean birth weight of ASDs was significantly lower than ADHD and control groups. Mean age of mother at birth of ADHDs was significantly younger than control group. In mean CSHQ scores, Night Wakings of ASDs was higher than ADHD group and Sleep Duration of ADHDs was significantly lower than control group. In mean Conners 3 scores, Anxiety of ASDs and ADHDs was significantly higher than control group respectively, Depression of ADHDs were significantly higher than control group. In mean PSI of child side scores, ASD group and ADHD group was significantly higher than control group respectively.

Conclusion: These findings suggest that ASD and ADHD in 5-year-olds have more difficulties than healthy children and 40 % of them haven't yet received little support.

Keywords: Neurodevelopmental disorders, Prevalence, Comorbidity, ASD, ADHD

PT-056

Evaluating change in symptomatic and functional level of children and youth with emotional disorders: a naturalistic observation study

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Objective: To describe changes in symptomatic and functional impairment for children and youth with emotional disorders treated at child and adolescent mental health outpatient services (CAMHS) in Norway. Another objective was to assess some pre-treatment characteristics as potential predictors and moderators of change. The study was of naturalistic observational type in which the treatment can be classified as “treatment as usual” (TAU). The Strengths and Difficulties Questionnaire (SDQ), the Health of the Nation Outcome Scale (HONOSCA) and the Children's Global Assessment Scale (CGAS) were used as change measures. The information from multiple informants allowed the evaluation of change from different perspectives.

Methods: The sample consisted of 84 children and youth with emotional disorders treated at two CAMHS in the North of Norway. The SDQ, the HONOSCA and the CGAS were administered at intake (T0), during assessment (T1) and approximately 6 months after T1 (T2). Change was analysed through the Linear Mixed Models procedure, and the results show that children and youth with emotional disorders experience statistically significant improvement per month during outpatient treatment according to nearly all the change measures. For the clinician rated scores, change rates during active assessment/treatment were larger than during the waitlist period. Evaluating change from the perspective of clinical significance showed that only a small proportion of the subjects had change scores that were statistically reliable and clinically significant. Whether an

actual change has occurred is uncertain for the majority of patients. Some preliminary findings regarding predictors and moderators of change are also presented.

PT-057

Evaluation and clinical implications of bilingual migrant children with language impairment: Experience of a child psychiatry Department in a Multicultural Parisian suburb

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Bilingualism is expected to concern more and more children and adolescents in industrialized countries, if one refers to the world's migration prospects in the coming years. In France, some child professionals are starting to adapt their educational tools in order to give space for language and cultural origin without stigmatization (language awareness classes for example). In child psychiatry, how can we treat and evaluate children of migrants who are addressed for specific language impairments often associated with psychiatric comorbidity? This communication will focus on the way we approach this issue in the “Centre du Language” of the child psychiatric department of Avicenne Hospital in Bobigny, a multicultural and deprived Parisian suburb. Because migration and bilingualism often render evaluation and treatment of children with language disorders more complex for child care professionals (school doctors, speech therapists, other child psychiatrists...), these children are often addressed to our center. For the past three decades, we have gained transcultural practice expertise and elaborated specific health care settings in order to treat children of migrants and their parents. First, we will focus on the specificity of the pathologies or situations met: selective mutism, attrition of the mother tongue, bilingualism particularities of migrants' children, and their psychiatric implications. We will then describe the research conducted with 150 bilingual Toddlers aged from 4 to 6 years old (50 Arabic speakers, 50 Tamil speakers, 50 Soninké speakers) which abled us inter alia to validate the ELAL Avicenne© (Language Evaluation for Allophones and new immigrants), a transcultural and universal evaluation tool which may be adapted to all migrant children in their mother tongue through an interpreter. Last, clinical outcomes of this research will be discussed, highlighting the importance of working with language status representations of parents in order to promote mother tongue transmission, often hindered by migration. This allows to bridge the gap between the two cultural backgrounds of these children, giving them the possibility to draw from their different cultures and to stimulate their creativity through interbreeding. Promotion of ELAL Avicenne© beyond our department will allow a better detection of specific language impairments of children of migrants.

PT-058

Evaluation of parent-infant relationship in a sample of children with regulation disorders of sensory processing

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Introduction: According to the Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood, Revised Edition (DC: 0-3R) the diagnosis of Regulation Disorders of Sensory Processing (RDSP) demands the presence of: sensory processing difficulties, motor difficulties and a specific behavioural pattern.

Caregivers have an important role because they can help modulate the child's behavioural responses to sensory input. On the other hand, symptoms have been shown to affect the individual relationships as well as their family engagement in personal and social routines. Parents exhibit reduced feelings of competence and frequently show signs of exhaustion.

Our aim is to describe the clinical characteristics of parent-infant relationship of the children followed in our department with RDSP.

Methods: Firstly, we consulted the clinical files of children diagnosed with RDSP according to the DC: 0-3R criteria, admitted at the Early Infancy Unit of our Department of Child and Adolescent Psychiatry between January 2013 and December 2014, aged from 0 to 4 years and 364 days.

We described demographic and clinical data such as the classification of child-caregiver interaction according to the Parent-Infant Relationship Global Assessment Scale (PIR- GAS) and Relationship Problems Checklist (RPCL).

Secondly, we analysed the type of RDSP according to the results from the PIR- GAS and RPCL classification systems.

Finally, we compared the results with a sample of children without an Axis I diagnosis, to better quantify the impairment in parent-infant relationship in dyads with RDSP.

Results: The clinical sample consisted of 74 children (67 males and 7 females).

The distribution according to the type of RDSP was: 25 (34 %) sensory stimulation seeking, 15 (20 %) hypersensitive and 13 (18 %) hyposensitive. Twenty-one children (28 %) showed mixed characteristics.

The global evaluation of PIR-GAS showed that only 53 % of infants with RDSP diagnosis had an “Adapted Relationship” with their caregivers. Forty-three percent revealed features of a disordered relationship and 4 % had a “Disordered Relationship”.

The 3 disordered relationships found concerned children with the sensory stimulation-seeking type of RDSP. This RDSP type is also associated with features of a disordered relationship in 9 other children.

Conclusion: Considering the difficulties inherent to children with RDSP, it was expected to find a high number of cases of disturbed relations or with features of disturbance. These results reinforce the impact of RDSP in parent-infant relationships. These parents face an increased challenge and mental health services must help them to improve the interaction and relationship with their children.

PT-059

Evaluation of social cognition in children of bipolar parents

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Bipolar disorder (BD) is a common and debilitating psychiatric disorder, which begins during adolescence in 50–66 % of cases. Youth with BD and offsprings of parents with BD can have impairments in social cognitive abilities such as social reciprocity and facial emotion recognition. In recent years, just like attention and memory problems,

social cognitive skills have been referred to as a possible endophenotype for bipolar disorder. In this study we aimed to explore social responsiveness and social cognitive abilities, as possible endophenotypal features, in bipolar offsprings aged between 9 and 18 years. Children and adolescents with a parent with BD ($n = 33$) diagnosis and age and sex matched controls with no family history of psychopathology ($n = 31$) were the sample of our study. A detailed form was used to define sociodemographic characteristics of the participants. The psychiatric diagnoses were established by using the Kiddie Schedule for Affective Disorders and Schizophrenia Present and Lifetime Version. Parents completed several questionnaires; Behavior Rating Inventory of Executive Function, for executive functions; Strengths And Difficulties Questionnaire, for emotional and behavioral problems; and Social Responsiveness Scale, for social reciprocity. Additionally, Reading The Mind in The Eyes Test was administered by the clinician to examine the social cognitive abilities of the subjects. The mean age was 12.77 ± 2.60 and 12.69 ± 2.54 years, for the risk group and the control group, respectively. Majority of the subjects were male, 63.6 % for the risk group and 58.1 % for the control group. Within developmental milestones, the first sentence acquisition was significantly delayed for the risk group ($p = 0.035$). Facial emotion recognition ability assessed by Reading The Mind in The Eyes was similar for two groups. Although they did not reach statistical significance, the scores of total difficulties subtest of the Strengths and Difficulties Questionnaire and set shifting subset of the BRIEF were higher in the risk group. Likewise, the scores the offsprings of BD patients on the Social Reciprocity Scale was higher than that of controls. However the deficits in social reciprocity failed to reach statistical significance ($p = 0.077$). As a result, offsprings of BD patients have deficits in social reciprocity. However, due to the relative small sample size and accordingly the uneven distribution of the sample, the difference between the groups failed to reach significance.

PT-060

Evaluation of the impact of an anti-stigma intervention based on direct contact targeted to adolescents

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Background: The stigma associated with mental illness is a significant impediment to seek help and access to services. Many children and adolescents suffering mental health symptoms do not identify and seek help for them. Interventions based on direct have proved to be efficient in eliminating this stigma.

Aims: Develop and evaluate an anti-stigma intervention based on direct contact with people with lived experience of mental disorder, within a sample group of students in their third year of secondary education.

Methods: A pilot programme is proposed which is interventional, with longitudinal prospective follow-up, quasi-experimental and with a control group. The efficiency of the intervention is to be measured on the Patrick Corrigan AQ-C8 scale, in paired samples design.

Results: A total of 531 students ($n = 531$) participated from four state secondary schools in Navarra.

Significant differences were observed (IC95 %), for five of eight items in the intrasubjects comparative scale, carried out at baseline and immediately after the intervention: Pity ($t = 8,012$, $p < 0.000$), Blame ($t = 2,160$, $p < 0.031$), Segregation ($t = 12,370$, $p < 0.000$), Help ($t = -2,852$, $p < 0.005$) and Avoidance ($t = 5,364$, $p < 0.000$).

Significant differences were found (IC90 %) for Danger ($t = 1,682$, $p < 0.093$) and Anger ($t = 1,708$, $p < 0.089$).

Significant differences were sustained (IC 95 %) on 6 months follow-up for Pity ($t = 5,840$, $p > 0.000$), Blame ($t = 2,171$, $p < 0.031$) y Segregation ($t = 5,794$, $p < 0.000$).

Conclusions and limitations: The intervention was proved to be effective in the reduction of prejudices, stereotypes and referred discriminatory behavior immediately after the intervention and on a 6-month follow-up. Effects are likely to lessen with time. Continued exposure could sustain benefits and build on the positive attitude changes achieved by first intervention.

References

- O'Driscoll C, Heary C, Hennessy E, McKeague L (2012) Explicit and implicit stigma towards peers with mental health problems in childhood and adolescence. *J Child Psychol Psychiatry* 53(10):1054–1062. doi:10.1111/j.1469-7610.2012.02580.
- Watson AC, Otey E, Westbrook AL, Gardner AL, Lamb TA, Corrigan PW, Fenton WS (2004) Changing middle schoolers' attitudes about mental illness through education. *Schizophr Bull* 30(3):563–572.
- Pinfold V, Toulmin H, Thornicroft G, Huxley P, Farmer P, Graham T (2003) Reducing psychiatric stigma and discrimination: evaluation of educational interventions in UK secondary schools. *Br J Psychiatry* 182:342–346.
- Schulze B, Richter-Werling M, Matschinger H, Angermeyer M (2003) Crazy? So what! Effects of a school project on student's attitudes towards people with schizophrenia. *Acta Psychiatr Scand* 107:142–150.

PT-061

Evaluation of the impact of living in family buildings on child and adolescent mental health

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Purpose of the study: A family building is an apartment building in where at least two relatives live in separate apartments. Living with relatives in “family buildings” is a feature unique to Turkey, more common in rural-urban immigration areas. This study is the first attempt in literature to research on “family buildings”; and life in family buildings is an issue that needs to be investigated deeply. In this study; we aim to research the relationship between the satisfaction level of those families living in family buildings and the effects on children and their families, in terms of psychopathology, parental attitudes, parenting practices and family functioning.

Methods used: Children between the ages of 0–18, referred to our university hospital outpatient clinic either for the first time or regularly, were informed about the research. 101 volunteers living in family buildings were included in the study group; and 36 volunteers not living in family buildings were included in the control group. Psychopathology and functionality were assessed by the KIDDIE-SADS. Children and parents were asked to fill questionnaires.

Summary of results: The study group consisted of 35 girls (34.6 %) and 66 boys (65.3 %). Age of the sample differed from 1.4 to 17.6 years ($M = 107.95 \pm 37.44$ months). 64.3 % of the study group and 52.8 % of the control group have psychiatric disturbances in their family history. ADHD has been the most common diagnose in both samples. 41 % of mothers reported ≥ 50 % dissatisfaction about living in family buildings. And 58 % of mothers believe their children's

behavioral and emotional symptoms are affected by living in the family buildings. The results of one-way variance analyses between “highly satisfied” group, “not-at-all satisfied” group and control group have shown significance in many areas. Knowing the satisfaction levels of families living in family buildings, gives us an idea about the depression level of parents, the difficulties the family experiences, the family functioning, the child's attachment properties and the quality of life—which would be very helpful and effective piece of information gathered in less than 2 min of the evaluation.

Conclusions: When evaluating the families living in family buildings, knowing the parents' satisfaction level has a major role in planning the medical treatment for both the child and the family. We should elaborate on the history of living in family buildings and the satisfaction level of the parents in our child psychiatry practice.

Keywords: Family building, Parental attitude, Functionality, Self, Attachment, Quality of life.

PT-062

Executive functions in developmental attention-deficit/hyperactivity disorder: comparison with adhd associated with rolandic epilepsy or rolandic spikes

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Attention-deficit/hyperactivity disorder (ADHD) is commonly seen together with pediatric epilepsy. Both the high prevalence of epileptiform abnormalities in children with ADHD and prevalent ADHD diagnosis preceding the first seizure in children with epilepsy suggest a bidirectional relationship between these two disorders. Common genetic predisposition, biochemical factors and effects of medications are all possible pathophysiological mechanisms considered in the literature to explain this co-occurrence. We aimed to explore the possible neuropsychological differences between developmental-ADHD (d-ADHD) and ADHD associated with Benign Rolandic Epilepsy (ADHD-BRE) and other ADHD cases associated with Rolandic Spikes (d-ADHD-RS).

Ninety-eight children (female = 25), aged between 6 and 12 (mean age: 8.06 ± 1.46), diagnosed with ADHD according to the DSM-IV-TR criteria were recruited to the study. The children diagnosed as having developmental ADHD (d-ADHD) ($n = 52$) with normal EEG examination were compared to children with d-ADHD-RS ($n = 25$) and to another group with ADHD-BRE ($n = 21$).

All subjects were given a neuropsychological test battery. We evaluated full scale IQ with Wechsler Intelligence Scale For Children-Revised (WISC-R), executive functions with Wisconsin Card Sorting Test (WCST), selective attention with Stroop Task, visual immediate and working memory with Visual Span subtests of Wechsler scales, semantic fluency with Category Naming Test, and phonetic fluency with phonemic verbal fluency task.

The educational years of parents, scores of Conners Teacher and Parent Rating Scales and, all total, verbal and performance IQ scores of WISC-R were not statistically different between the groups. The median full-scale IQ scores of the groups d-ADHD, d-ADHD-RS and ADHD-BRE were found 107 ± 13 , 107 ± 16 , 106 ± 12 , respectively.

Vocabulary ($F = 5.10$; $p = 0.008$) and digit span ($F = 10.80$; $p = 0.000$) subtests of WISC-R and failure to maintain set score ($F = 3.45$; $p = 0.036$) of WCST were different between the groups. d-ADHD cases had a lower Digit Span score (mean \pm SD 8.25 ± 2.03) compared to

both control groups with BRE (10.65 ± 2.52) and Rolandic Spikes (10.33 ± 2.82). Although children with d-ADHD had higher vocabulary subtest scores compared to both control groups, only the difference between the group with d-ADHD-RS was statistically significant (mean \pm SD 11.32 ± 2.27 ; 9.95 ± 2.09 ; 9.75 ± 2.33). In addition failure to maintain set scores of WCST in d-ADHD group were higher compared to subjects with ADHD-BRE (mean \pm SD 1.83 ± 1.55 ; 0.84 ± 0.96).

In a study which searched neuropsychological endophenotypes in ADHD, digit span performance was linked to a locus and low digit span performance was suggested to be an endophenotype. We found significantly low digit span score in d-ADHD group compared to controls and it can be suggested that d-ADHD might have a different pathogenetic process compared to the ADHD associated with BRE or Rolandic Spikes.

PT-063

Experience of holding psychocorrectional work with parents of children with autism at the stage of grief in Belarus

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Experience of holding psychocorrectional work with parents of children with autism at the stage of grief in Belarus

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The reaction of parents to the diagnosis of the child “autism” is the experience of grief. They experience grief not only in diagnosis but also throughout life due to growing up of an autistic child. Chronic unreacted sadness causes feelings of hopelessness and they cannot cope with negative feelings.

Object: choose the therapy modules of psychocorrectional program by studying the level of anxiety and depression in parents of children with autism.

Materials and methods: 25 mothers of children with autism between the ages of 25 and 40 years who gave informed consent were included in the study. The level of anxiety and depression was assessed by «Hospital Anxiety and Depression Skale».

Results: 72 % of mothers are determined by the high levels of anxiety, 20 %—subclinical anxiety.

The high level of depression was in 32 % of mothers and 20 % has subclinical level, indicating the self-imposed isolation, a gloomy vision of the future of the child and the family as a whole.

Psychocorrectional program included 10 sessions: in affective period—the separation of the facts that the diagnosis of the child is not the whole child and not the whole life of the family. Mothers were taught the methods of reconciliation with the loss of previously constructed image of the child, studied constructive attitude to the diagnosis of autism and related it to past experience; in the gnostic period: teaching them the understanding of the fact that each reason has “transformation keys” to change the investigation of autism, as an alternative state of operation “with the language of interaction”, the search for finding a new sense of life; in behavioral period: learning to trust the child and his inner “autistic” world, the realization of their needs, trust the work of the experts.

After the course, the levels of anxiety and depression decreased ($p < 0.01$), become irrelevant phobic anxiety and feelings, there was the prospect of belief in the possibility of yourself and your baby.

PT-064

Experiences with refusal of off-label prescribing of psychotropic medications to children and adolescents in Japan

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Background: In child and adolescent psychiatry, off-label prescribing of psychotropic medications is common. However, it is unclear what factors of prescribers’ attitudes are negatively associated with the treatment. The purpose of this study was to identify the factors that were associated with experiences of refusals of off-label prescribing to children and adolescents (hereafter referred to as “children”) by Japanese child and adolescent psychiatrists.

Methods: A prospective questionnaire was sent to 1628 psychiatrists belonging to the Japanese Society for Child and Adolescent Psychiatry. Stepwise logistic regression analyses were used to determine whether demographic characteristics or experiences with the off-label prescribing of psychotropic medications were able to independently predict refusals of off-label prescribing. The questionnaire was anonymous and asked about generic prescribing and the characteristics of the off-label prescribing of psychotropic medications. The board of directors of the Japanese Society for Child and Adolescent Psychiatry approved this survey and advised that it did not require formal review by the ethics committee of the Society.

Results: The final sample included 447 psychiatrists, and 93 % of the respondents (416/447) had experiences with off-label prescribing to children. In addition, 60.393 % of the respondents (251/416) had experiences with refusal when they informed children and/or parents of the off-label prescribing. The most commonly prescribed off-label psychotropic medications were antipsychotics (82.093 %). Experiences with refusals were more frequent when respondents informed parents ($p = 0.02$) and children ($p < 0.01$) about the off-label prescribing significantly than when they did not. A stepwise logistic regression analysis revealed that informed off-label prescribing to parents [odds ratio (OR) 2.73; 95 % confidence interval (CI) 1.09–6.82] or to children (OR 1.70; 95 % CI 1.12–2.58) and antidepressant use (OR 2.98; 95 % CI 1.25–7.10) increased the odds of refusals of off-label prescribing. Years in practice rarely influenced the odds (OR 0.98; 95 % CI 0.96–1).

Discussion: Off-label prescribing is common among child and adolescent psychiatrists in Japan. Furthermore, psychiatrists’ experiences with refusal of the prescribing were significantly associated with the category of psychotropic medications. Further studies are required to support the development of decision-making among clinicians.

PT-065

Finding an alternative to self harm through group based intervention for short stay hospitalized adolescents in Madrid

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In recent years, a considerable increase in self harm behavior has been detected in adolescents who reach our Child and Adolescent Psychiatric Service, matching numbers identified in other occidental countries, with figures exceeding a 20 % lifetime prevalence of non-suicidal self harm behaviors in adolescents 1. Almost 50 % of all admissions to our Adolescent's Unit are due to self harm behaviors.

Since 2014, in our hospitalization unit, the nursing team has been running weekly group therapy for those inpatient adolescents who harm themselves and demonstrate motivation to change. This intervention is included in the specific ATraPA program, created in our Unit in 2010 in order to attend the adolescent population with severe emotional instability and suicidal and/or parasuicidal behavior.

The perspective of our intervention is based on the dialectical behavior therapy (DBT), which has clinically proven effectiveness 2. The main objective is for patients to learn how to tolerate and express their emotional distress using alternative skills instead of resorting to self harm. Group sessions are complemented with the individual psychotherapy of each patient, and with the use of a table specifically designed for the patient to register the use of new skills acquired through functional analysis and practical supervision. The family also receives guidance to help them take part in the adolescent's treatment plan.

First of all, the psychiatrist responsible for the patient has an individual session to evaluate motivation and to prepare the adolescent for the group intervention. Both verbal and written information is available for this purpose.

Group sessions follow this plan:

1. Conscious observation of the main factors that lead to self harm.
2. Recognition of the emotions they feel.
3. Analysis of the pros and cons of self harm behaviour.
4. Avoidance of judgement and validation of their thoughts and feelings.
5. Learning how to stop when emotions become intense.
6. Asking for help.
7. Practise of alternative skills to channel distress.
8. Distribution of the table used by patients to record their daily tasks.

This is designed for a one-only session, though the patients can keep attending if their stay in hospital is prolonged for more than a week. It is very important that further interventions carried out with the adolescent are in harmony with the contents of the group. In parent interviews, a structured plan of action will be laid out.

Although to date we cannot show results, the general impression is positive both from patients/families and from professionals.

PT-066

Gender differences in risk factors of infant psychopathological symptoms

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Some studies have shown that there are gender differences in the risk to have some psychopathological symptoms during infancy, even, there are studies that have shown that some risk factors affects in different way to girls and boys along their development suggesting

that boys have a special vulnerability to mental health problems during infancy. The main aim of this work is to determine which prenatal, perinatal and postnatal factors are related to infant psychopathological symptoms at 30 months taking into account if there are gender differences. The sample was composed by 89 father-mother-child triads who were followed during pregnancy and infant development at 30 months. The prenatal, perinatal and postnatal risk factors collected were: tobacco smoke during pregnancy (including second-hand smoking), infant tobacco exposure during their development, prenatal trait and state anxiety (State-Trait Anxiety Inventory-STAI), gestational age at birth, weight and length at birth, normal or difficult childbirth, parity, mother-father-child attachment at 6–12–30 months (Attachment subscale of the Parenting Stress Index-PSI), mother-father general health at 6–12–30 months (Total Score of the General Health Questionnaire-GHQ), infant breastfeeding and familiar socioeconomic status. The infant psychopathological symptoms were collected at 30 months by the Child Behavior Checklist (CBCL). After the study of the collinearity between variables a linear regression model was performed for each CBCL syndrome score (emotionally reactive, anxious/depressed, somatic complaints, withdrawn, sleep problems, attention problems, aggressive behavior) and the results show that, in boys, lower attachment scores at 6 months were related to poorer scores in emotionally reactive, somatic complaints, withdrawn, and sleep problems. Moreover, the infant exposure to tobacco smoke and a shorter gestational age at birth (together with attachment score) were related to a poor withdrawn score too. In girls, mother's anxiety scores have shown relations with anxious/depressed and attention problems score. Our results show that there are gender differences in risk factors related to infant psychopathological symptoms having the attachment experiences an important in infant psychological development. Health professionals should pay more attention to these aspects promoting actions to assess the familial attachment, to detect alterations and to prevent mental health problems in the future.

Keywords: Infant psychopathological problems, Risk factors, Gender differences, Attachment, Tobacco exposure.

PT-067

Genetic variability of white matter related genes: association study in schizophrenia and autism spectrum disorders

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Background: Compelling evidence supports the existence of clinical and neurobiological links between Schizophrenia (SZ) and Autism Spectrum Disorders (ASD) (Rapoport et al. 2009), and both disorders shown to present white matter abnormalities (Dennis and Thompson 2013, Wheeler and Voineskos 2014). The aim of this study was to analyse the sequence variability of a set of white matter related genes in a group of SZ and ASD patients and healthy subjects in order to: (i) explore whether these genetic variants are associated with the risk for these disorders, (ii) test the diagnosis specificity of these genetic variants across the SZ-ASD continuum.

PT-068**Group work with internally displaced (IDP) children and adolescents in the community**

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Introduction: This paper presents findings of social group work conducted with IDP children and young people from Kosovo settled in Collective Centers in southern Serbia. The aim of the scientific research was to explore and evaluate models of group work with children and their families, that are used in the community and community care settings.

Methodology: the research involved 70 young IDPs, age 11–18; instruments used were: Achenbach scale YSR, SFI scale; statistical data: Pearson Chi square test.

The purpose of the research was:

- Exploring the modalities of psycho-social group work with new social groups formed under conditions of prolonged and cumulative stress during societal transitions;
- Determining the effectiveness of psycho-social group work and a multi-disciplinary approach to working with affected children and their families in a community context.

Results: The results of the Achenbach scale showed that 70 % of respondents were displaying delinquent and aggressive behavior. The results suggested the emergence of a new generation of young people who have antisocial behavior. Manifested negative behavior is often a clinical sign of depressive conditions in young people. Those involved in group work exhibited fewer symptoms of delinquency, aggression, and withdrawal into themselves. Statistical data also showed that the group work had a positive impact on the reduction of manifestation of depressive states and withdrawal. By using pro-social models in group work, and offering positive role models for the young people to identify with, we found that the social dimension has a significant impact on improving the health and behavior of the participants.

Conclusion: The political transition in Serbia in the last 20 years led to the emergence of great poverty amongst a large number of refugees, internally displaced populations and returnees from Western Europe—and to the emergence of new social community groups in our society. In the circumstances of social and political transition, poverty and crises there was an emerging need for the application of group work at a local community level in order to increase their inner resources. This situation also necessitated a multidisciplinary approach to protecting these vulnerable groups including psychological, social and health measures.

Keywords: Stress, Social group work, Children, Adolescents, Traumatic event, Community care, Psychiatry, Psychotherapy, Multi-agency, Self-agency.

PT-069**Hospital Garcia de Orta E.P.E. Infant Mental Health Consultation, Portugal**

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Hospital Garcia da Orta E.P.E. (HGO) is a state institution that attends Almada county population of approximately 350,000 inhabitants.

Almada country is a Lisboa nearby region with several suburb neighborhoods dealing with adverse social-economics conditions.

The HGO Infant Mental Health Consultation is being developed since December 2013 with the purpose to respond to infants and their families needs regarding psychological and relational difficulties they are struggling with.

In this presentation we intend to expose the journey we engaged in order to offer an adequate response to children at early developmental stages, knowing that Infant Mental Health is a specific domain sustained by strong scientific data and theoretical support that uses its own observation technics and intervention methods.

Our starting point was studying population socio-demographic characteristics and knowing the community structures and resources related to infancy. At the same time we established links with the Portuguese Association for Infant Mental Health—Ser Bebé, an affiliate association of WAIMH (World Association for Infant Mental Health).

We conceived a model of consultation that is distinct from the general attendance at the HGO Child and Adolescent Psychiatry Unit, allowing a prompt intervention and the use of audio-visual technology for clinical and research purposes. We also use a particular diagnostic classification, “The Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood -Revised” (DC 0-3R).

Since the beginning of the project, 1 year ago, we have attended 16 infants under 3 years old referred to consultation through Primary Health Care Units and HGO Pediatrics Service due mainly to sleep and eating difficulties.

Along this last year our clinical practice showed us limitations that inspire us to continuously rethink and adjust our model of intervention.

Keywords: Infancy, Mental health, Service model.

PT-070**How are you now? A 5-years follow up study in Infant Mental Health**

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Background: The “Unidade da Primeira Infância” (UPI), located in Lisbon, is a specialized unit that focus on providing mental health care for young children aged from zero to three and their parents/caregivers. Clinical research is also an important part of the clinical work and follow-up studies, like the one presented here, are conducted annually. We consider these studies especially important, since there is still very limited data on the future impact of psychopathologies diagnosed at early this age.

The aim of this study is to know, through a 5 years follow-up study, what is the evolution of the children whose first evaluation was made in this unit in 2009.

Methods: The sample used in this study consists of children aged from zero to three who had their first observation made in the UPI in 2009.

According to the children’s clinical records we were able to characterize our sample using the following parameters: age at the time of the first psychiatric observation; gender; diagnosis according to DC 0-3 R (Axis I and II); therapeutic intervention and duration of the intervention. In order to obtain current data on the child’s situation,

we also conducted an interview to the main caregiver, by telephone, which involved applying an appropriate follow-up questionnaire, which included completing the SDQ scale—version for parents.

Results: The results were submitted to a statistical analysis using Excel and SPSS and we are still finishing it. The rate of responders was approximately 60 % from a total N of 127. Everyone that we were able to reach agreed to participate in the study.

Preliminary results point out to an overall satisfaction with the quality of services provided, and a very low prevalence of current mental health problem in children, except in those with more severe cases of Relating and Communicating Disorders.

This work is in line with the most recent studies that find that the relation between mental health disorders at a young age (0–3 years) and psychopathology in later childhood is not linear or deterministic. However, we are looking at a small sample that was given a clinical intervention at a specialized center, and the results cannot, therefore, be extrapolated to the general population. The fact that most of the children in our study were better 5 years after the initial evaluation should also raise the discussion of the importance of ensuring an early and adequate intervention for these children.

PT-071

How many sessions should a case seen in an outpatient specialist CAMHS service have? Who gets what for how long? A year's experience in a generic tier 3 CAMHS service in Dorset, UK

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Aims: We attempted to answer above question by reviewing the literature and analysing one county's experience over a year.

Method: We looked at what happened to 108 randomly selected cases seen and taken on by an outpatient Tier 3 CAMHS service in Dorset (UK) between 26/07/2010 and 28/01/2012. Electronic case notes were reviewed.

Results: 52 were male, 56 female, mean age at referral was 12 (range 4–17). 30 % had neurodevelopmental problems (ASD, ADHD, Tics); 27 % externalising (behavioural or conduct) and 43 % internalising (mood, anxiety, PTSD, ED, emerging PD, OCD) difficulties on initial assessment. A year later 60 % had been discharged (with a statistically significant average improvement of over 10 points on CGAS scores,) and 40 % remained open to the service. Outcome measures, types of therapy and comparisons between the two groups were looked at in detail. The mean number of sessions attended was 7 (range 2–27) for discharged cases and 15 (range 2–62) for open cases. Open cases had lower CGAS scores on referral and more difficulties with language, learning and peer relationships. They received more sessions with doctors and nurses and remained open to the service for 16 months on average whereas those discharged were open for 8 months. Open cases were more likely to receive family therapy (48 % of all psychological therapies delivered to the group) and a combination of psychological treatments, whereas discharged young people utilised CBT most frequently (48 % of psychotherapeutic interventions). Face to face contact represented around 50 % of the work in both groups and telephone contacts 40 %. There were high rates of DNAs and cancellations. Amongst subcategories of discharged patients (externalising, internalising, neurodevelopmental) no statistically significant differences in CGAS scores on admission and discharge, number of contacts with various professionals or types of psychological therapy delivered was found.

Discussion: The literature review gave no clear answer. These findings have implications for the planning and delivery of generic CAMHS services including how to meet the needs of those with neurodevelopmental and externalising problems, how many appointments are required for different patient groups, the management of DNAs as well as implications for future commissioning.

Keywords: Service planning, Specialised children and adolescent mental health service, Length of treatment, Number of sessions, Outcome measures.

PT-072

Importance of early childhood observation related to intervention in context of community care

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Importance of early childhood observation related to intervention in context of community care.

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Introduction: Primary health care providers, particularly paediatricians and visiting nurses, have a central and co-coordinating role in providing support to the child and its family, particularly in the early years.

Some primary health Centres have organized development counselling services for children at risk. As separate organizational or functional units, these exist only in a minority of municipalities. Child psychiatrists are helping professional development of paediatricians for early childhood development, early stimulation and early detection of developmental difficulties, diagnostic and early interventions, on all levels is planned in order to expand access to quality services. Also, parenting education and home visiting programs are needed to reduce the impacts of specific stressors on the home environment (severe poverty, maternal depression, substance abuse, poverty, maternal depression, family violence etc.).

Special focus of the symposium will be also on the disciplining of children in Serbia; hopefully in 2015 Serbia will be one of 27 countries which prohibits the corporal punishment, and our association strongly support the initiative of changing law and prohibiting corporal punishment. Twenty-eight % of children in Serbia are disciplined exclusively through only non-violent methods, while in general 67 % of children aged 2–14 years have experienced violent discipline, which includes psychological aggression and/or physical punishment.

We will present the model of Play therapy as a wide area of therapeutic intervention based on play with a mean to help children and their parents to manage their problems and reach their objectives. Child-Centered Play Therapy is one of the effective and frequently used forms of play therapy.

Conclusion: Early detection and timely and adequate interventions—support and treatment for children with developmental difficulties are crucial for maximizing potential of each child. Therefore there is need to boost capacities of the primary health care centers in supporting parents of small children for early stimulation as well as in increasing their effectiveness in early detection of developmental risks. The partnership is based on the belief that personal experience must inform professional practice so that the needs of the community are coherently and appropriately responded to. We feel that our joint social responsibility is to raise awareness, inform curriculum, research policy and practice, change social perspectives and break stereotypes that affect families in our community in the long-term.

Keywords: Early development, Counseling centers, Visiting nurses, Punishment, Play therapy, Community care

PT-073

Influence of Val158MET polymorphism in COMT gene on grey matter in early onset-first episode patients

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Background: Catechol-o-methyltransferase (COMT) gene is considered a promising schizophrenia susceptibility gene due to COMT enzyme's role on dopamine degradation. Val allele variant have higher activity leading to decreased dopamine biodisponibility in prefrontal regions 1. Val allele has been associated to worse executive function measures in schizophrenic patients 2. A relationship between this cognitive domain and frontal volume are widely extended in same population 3. Although there are mixed evidence on association between COMT variant and volume in frontal area, not previous studies have reported results regarding early onset psychosis (under 18 years old) (EO-FEP).

With this study we aim to investigate the impact of Val158Met polymorphism on prefrontal gray matter (GM) in EO- FEP and healthy controls.

Methods: 37 EO-FEP (diagnosed of schizophrenia, schizophreniform and schizoaffective disorders) and 23 controls were included in the study.

The Val158Met single nucleotide polymorphism was genotyped by GoldenGate assay with the Veracode system. Allelic variants were grouped as Met/Met and Val carriers. Magnetic resonance images were processed through a semiautomatic method based on the Talairach atlas and SPM for tissue segmentation. Prefrontal area was divided into superior, medial and inferior areas. To minimize the effect of age, site and total brain volume, the standardized residuals of GM data after a regression were used for the analyses.

Comparisons were assessed by means of bivariate (t-student) and multivariate analysis (linear regression using gender, race and socioeconomic status as controlling variables).

Results: 37 EO-FEP [10 females (27 %); mean age 15.68, SD = 1.73; 30 Val carriers (69.6 %)] and 23 controls [7 females (30 %); mean age 14.83, SD = 2.59; 16 (81.1 %)] were included in the study.

Val carriers showed significant decreased volume in GM compared to Metmet on right superior $t(35) = 2.17$, $p = 0.037$ and left medial prefrontal $t(35) = 2.92$, $p = 0.006$ in EO-FEP patients. This difference did not appear in the control group [$t(21) = -1.09$, $p = 0.287$; $t(21) = -0.54$, $p = 0.596$]. No significant differences were found in other prefrontal measures.

The linear regression showed that the only significant predictor of left medial prefrontal was the COMT in EO-FEP group [beta: -0.458 , 95 % CI $(-1.564, -0.129)$, $p = 0.007$] and a tendency of right prefrontal superior [beta: -0.295 , 95 % CI $(-1.564, 0.129)$, $p = 0.094$] but not in the control group.

Discussion: In this study, Val carriers variants were associated with a decreased GM right superior and left medial prefrontal in patients with EO-FEP compared to met homozygotes. No other significant differences were obtained regarding COMT allelic variant. It suggests COMT could aggravate cortical prefrontal alterations in EO-FEP.

PT-074

Inpatient dialectical behavior therapy for adolescents: a retrospective study

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Introduction: DBT-A is an effective treatment for adolescent patients with suicidal and self-injurious behavior. Indication for DBT-A included e.g. impulsivity, Binge-eating and purging behavior, dissociation, substance misuse or identity problems. Aim of this study is to evaluate the course of inpatient DBT-A treatment.

Method: This is a retrospective study of 89 adolescents treated at the Center of Child and Adolescent Psychiatry and Psychotherapy, Clenia Littenheid AG, at an inpatient DBT-A unit within a 3-years-period from 2011 up to 2014. Assessments of self-harm, suicidal ideation, symptoms of borderline personality disorder, comorbid psychiatric disorders, frequency of hospitalizations, duration of stay and psychosocial functioning.

Results: About the half of all adolescents fulfilled criteria of emotionally unstable personality disorder (ICD-10). Very often comorbid disorders were observed. In male adolescents predominate conduct disorders. Most patients have had several inpatient treatments before DBT-A was started. Duration of self-harm was about 3 years in average. Frequently alcohol and cannabis misuse were reported and complicate inpatient treatment. However, comorbid depressive disorders improved inpatient treatment. Self-harm and symptoms of borderline personality disorder were significantly improved at the end of trial period.

Conclusion: DBT-A is a very successful therapy in adolescents even in patients with complex disorders.

PT-075

Interaction of preadolescents with autism: focus on speech prosody, gaze behavior and misunderstanding situations

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This paper presents the main results of a research project directed towards the interaction of Finnish-speaking preadolescents afflicted with ASD. More precisely, the project focuses on prosody of speech, gaze behavior and misunderstanding situations occurring in ASD boys' interaction. The data comes from two group therapy sessions where seven 11–13-year-old boys afflicted with ASD interact with each other and with their therapists. Methodologically, two different viewpoints have been adopted. One of them is mainly qualitative (conversation analysis) and the other one is most of all quantitative (experimental and instrumental phonetics).

According to this study, speech rhythm is the prosodic parameter that includes most prominent features in preadolescent ASD boys' speech. Pauses, which naturally constitute an important rhythmic factor, also appear to be a highly prominent characteristic. Pitch and the level of loudness are often considered to be prominent, too. Concerning the pitch, it is noteworthy that pitch excursions—that is,

melodic rises and falls—are assessed to be prominent much more frequently than flat pitch, which is “traditionally” considered to be typical of people afflicted with ASD.

One of the main findings of the project is that ASD subjects’ degree of overall prosodic prominence correlates partially with the degree of intelligibility of their speech. This proves that prosodic features do play a role in the intelligibility of speech.

The literal interpretation of what is said is the most common cause of understanding problems in this data. The ASD boys of the data tend to interpret literally words that are used in an abstract sense. It is also typical of them to miss implicit messages such as hidden requests. Topical discontinuities are another typical cause of understanding problems in this data. The boys often present remarks that are relevant to the topic but hard to understand for example because of a sudden change of perspective. They may also present remarks that have nothing to do with the topic under discussion without any metalinguistic introduction or topical transition. The common feature to all these cases is the insufficient interpretational framework for what is said.

All seven participants of the study avoid direct eye contact with the interlocutors when producing spontaneous speech. Different patterns are used for this. The most frequent patterns consist of 1. fixing one’s gaze straight ahead; 2. letting one’s gaze wander around; and 3. looking at one’s own hands when speaking.

PT-076 **Integrating children’s mental health care in the primary health care system -Langadas health center**

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Worldwide 10–20 % of children and adolescents experience mental disorders which, if not treated, can severely influence their development (World Health Organization 2014). One out of four children examined in primary health care services present mental health problems; however it is not necessary for all to have special mental health services (Carralda et al. 1999, 2005). Collaborative mental health care partnerships are important to the integration of mental health into pediatric primary care (AACAP 2010).

The focus of this study is on the contributions of the mental health professionals (psychologists, psychiatrists) in children’s primary health care and on the multiple interventions and actions in schools, in families and in the local community.

The Health Center is part of the primary health care system-National Health System, is located in Langadas (a small town in a semi-rural area) and it is the only one in Greece which has employed psychologists. Since 2010 mental health services for children and adolescents are provided by two psychologists and one visiting child and adolescent psychiatrist (who visits the Health Center twice a month since 2006).

The service includes (a) collaboration of the psychologists with pediatricians and other primary health care providers of the Center, (b) on-demand psychiatric consultation to the psychologist or pediatrician and face-to-face assessments and consultations with the patient and/or family by the child and adolescent psychiatrist, (c) collaboration with schools and other child-serving agencies.

There is systematic care coordination with the child guidance clinic of the region’s health sector (with child psychiatric- psychological specialty services) where children are referred when a more specialized assessment or intervention is needed.

Since 2010, 346 children and adolescents with various developmental, emotional and behavioural difficulties were examined and are followed up every 3, 6 or 12 months.

A case report of an 11-year-old child demonstrates the work and collaboration with the family and the school through intense psychological support and child psychiatric consultation.

We conclude that early intervention, improved access of children and their families to mental health care and the caregivers’ collaboration in the primary health care are essential for the children’s potential to live fulfilling and productive lives.

Keywords: Children’s mental health care, Primary health care

PT-077 **Investigating neuronal correlates of emotion regulation in young adults**

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Background: Emotion and cognition interact with one another during emotion processing and regulation, as emotional stimuli can influence cognitive control and the other way around. However, the underlying neuronal underpinnings that constitute this relationship are still being investigated. This study uses an experimental manipulation, which focuses mainly on the investigation of the relationship between pre-activation of the ventral affective processing system (emotional prime) and the engagement of the dorsal executive control system (stroop task). Additionally, the association between neural correlates of emotion regulation and behavioural indicators of attention, anxiety and aggression problems will be analysed.

Method: We employ whole brain fMRI during emotional priming (adapted from Hart et al. 2010). In this task, each trial starts with an aversive/neutral prime (150 ms) followed by a number stroop task [e.g. array of 1, 2, 3, or 4 digits (1500 ms)]. Participants indicate per button press the number of items presented, which is either congruent or incongruent with the digits used. Star shaped stimuli represent a baseline counting condition. Contrasts of interest are represented by stroop trials preceded by a negative or neutral prime (incongruent > congruent under distress) vs. (incongruent > congruent: neutral). All participants are further characterized by standardized testing (IQ, handedness, mood, behavioral and emotional problems, psychopathic traits), Child Behavior Checklist and background questionnaires.

Results: We here present preliminary results from our pilot study in typically developing young adults (17 girls/14 boys; 18–24 years). Behaviorally, our task yielded both a significant Stroop effect and emotional prime effect (i.e. negative content prolongs reaction time). In addition, preliminary neuroimaging data indicates not only altered BOLD responses for the different emotional primes, but also that this effect depends on the Stroop task.

Conclusion: Our work is in line with previous studies, suggesting that goal-directed processing may interfere with the neuronal response evoked by emotional input.

Keywords: Emotion processing, Emotion regulation, Neuroimaging, Stroop, Emotional priming, Social disorders

PT-078**Investigation of parent-of-origin effects in autism spectrum disorders***S. Connolly, R. Anney, L. Gallagher, E. Heron*

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Background: The detection of Parent-of-Origin (PoO) effects aims to identify whether or not the functionality of alleles, and in turn associated phenotypic traits, depends on the parental origin of the alleles. Autism Spectrum Disorders (ASD) are considered to be heritable neurodevelopmental disorders but in the majority of ASD cases, the genetic cause cannot be identified. Exploring and identifying possible PoO effects is an important step in trying to understand the genetic mechanisms underlying ASDs.

Objectives: To investigate parent-of-origin effects, such as imprinting and maternal genetic effects, in ASD using Genome Wide Association Study (GWAS) datasets.

Methods: We use a multinomial model run in the software EMIM to investigate parent-of-origin effects in the Autism Genomic Project (AGP) dataset. Since this model is complex, it has less power than a typical GWAS analysis, and given that the GWA threshold of 5×10^{-8} has been considered strict, we employ a Bayesian adapted threshold that takes into account the power at each SNP.

Results: Based on the use of the Bayesian threshold approach, we found 103 different regions that were found to have an imprinting and/or maternal genetic effect(s). We found two results $<5 \times 10^{-7}$, one for paternal imprinting on chromosome 7 and the other for a maternal genetic effect on chromosome 15 in the MGA gene. We found 4 regions that have been previously identified as showing evidence of PoO effects in ASD. These include a maternal genetic effect in a region that was also identified as having a maternal genetic effect by Tsang et al. 2013 on chromosome 11 in the MAML2 gene and a maternal imprinting effect on chromosome 18 where Yuan and Dougherty 2014 found a maternal genetic effect (it is worth noting that maternal imprinting and maternal genetic effects have been known to mimic each other).

Conclusion: To our knowledge, this is the first genome-wide study to test for both imprinting and maternal genetic effects simultaneously in ASD and the first to implement the Bayesian adapted thresholds that take into consideration the power of the test. We found some promising results that we are currently hoping to replicate in the Simons Simplex Collection autism data set.

PT-079**Is there a relation between parents' executive functions and their parenting style?***Y. Cruz Alaniz, M. Jané Ballabriga, A. Bonillo Martin*

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Is there a relation between parents' Executive Functions and their parenting style?

Parent-child interaction has become an interesting research subject because of the effects on child development. It has been reported that parenting styles (e.g. harsh and warmth parenting) affect child Executive Functions (EF) and predict Oppositional Defiant Disorder (ODD) symptoms. In order to improve the quality of parent-child relations, it's been suggested that parents' EF have an effect on parenting style. Most studies have focused on mother parenting, the

role of the father has not been fully investigated, even when recently the role of the father is more involved within the family dynamic. To investigate the relation between both parents' EF and their parenting style we examined 100 families with preschool children and 235 families with children of 6–12 years of age. All parents answered questionnaires to evaluate their parenting style, executive functions and child symptomatology. The analysis was made testing Structural Equation Models (SEM). The results of both studies confirmed previous results. In both studies, we did not find a significant path of father EF towards any parenting styles, nor any relation between warmth parenting and ODD symptoms. The main result is focused on the strong relation between mothers' EF and harsh parenting, and its relation on both the odd symptomatology of pre-schooler children and on the significant path of child EF of children in elementary school. Our findings discuss the importance of addressing parenting interventions in order to prevent further conduct disruptive disorders or any dysfunction in child EF. Longitudinal and experimental research is needed for future conclusions.

PT-080**Longitudinal changes in Chinese adolescent girls' mental health during the transition from primary to junior high school***J. Guo*

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Background: Adolescence is a time of multiple transitions and a critical developmental period with long term implications for the mental health of young people. The transition from primary to junior high school has been documented as a period of stress for adolescents, associated with changes in self-esteem and psychological difficulties, such as loneliness, anxiety, and depression. However, much of evidence has been based on cross-sectional data in Western populations. Little is known about early adolescent transitions among Chinese adolescents.

Aim: The aim of this study is to overcome the aforementioned limitations by investigating the longitudinal changes in a range of measures of psychosomatic and psychological wellbeing among Chinese early adolescent girls.

Methods: A sample of Chinese girls from Beijing were tracked at three time points from the last term of primary school (mean age = 12.20), through the first term of junior high school, to the end of first year in junior high school (N = 425), to provide a 1 year longitudinal profile of their psychosomatic and psychological changes before, during, and after the school transition.

At each time point, participants completed a self-report questionnaire in their school class consisting of a variety of well-established psychometric instruments to measure global life satisfaction, self-esteem, psychosomatic symptoms, loneliness, anxiety, and depression.

Results: Repeated measures ANOVA examined longitudinal changes in these psychological measures. The cognitive and affective aspect of depression increased longitudinally. Global self-esteem and domain-specific self-esteem regarding athletic competence, physical appearance, and behavioural conduct significantly decreased between the end of primary school and the end of the first year in junior high school. Loneliness and anxiety peaked during the transition and significantly improved after the transition. Most psychosomatic symptoms reduced longitudinally, including sleeping difficulties, tiredness, headaches, and dizziness, whereas backaches and bad temper increased over time.

Conclusion: Some psychological measures indicated increases in mental health difficulties. However, other areas of psychological

wellbeing improved following the transition from primary to junior high school. Taken together, findings suggested an overall positive developmental phase for Chinese adolescent girls in this study. The results highlight cultural differences in the experience of early adolescent transitions between these Chinese findings and Western literature on adolescent transitions and outcomes.

PT-081

Low and high birth weight and the risk of child attention problems

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Objective: To study the prospective association between birth weight and Attention Problems and to explore the role of maternal body mass index (BMI) in this association.

Study design: In 6015 children of a population-based cohort (Rotterdam, the Netherlands, 2001–2005), information on birth weight was collected and gestational age-adjusted standard deviation (SD)-scores were calculated. At age 6 years, parents assessed Attention Problems with the Child Behavior Checklist. We used linear regression to study the association of birth weight with Attention Problem score and examined the modification of this association by maternal early pregnancy BMI.

Results: The observed association between birth weight and Attention Problem score was curvilinear (adjusted β per birth weight SD-score 2: 0.02, 95 % CI 0.01; 0.03, $P = 0.003$); the turning point equals 3.6 kg at term. In analyses of the extreme tails of the birth weight distribution, the associations with Attention Problem score disappeared after adjustment for socio-economic confounders. Maternal early pregnancy BMI moderated the association of child birth weight with Attention Problem score (P -interaction = 0.005, with curvilinear term in model).

Conclusions: Higher birth weight was related to less Attention Problems but from a birth weight of about 3.6 kg or more, a higher birth weight did not reduce the risk of Attention Problems any further. However, in children of obese mothers (BMI > 30 kg/m²), high birth weight may increase the risk of Attention Problems.

PT-082

Memoria humoral. Una Aportacion Psicoanalitica Sobre los Sistemas de Fijacion Somatica en la Infancia

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Françoise Ansermet nos habló en fechas recientes en nuestra ciudad, de plasticidad neuronal, concepto de vieja raigambre. También el Dr. Javier Fernández Soriano, que en su etapa investigador en histología, ha podido revisar con cierto asombro por su actualidad, las preparaciones microscópicas de Santiago Ramón y Cajal, y nos comentó que ya entonces plantea Cajal con toda claridad, las bases para la programación y reprogramación permanentes que subyace al concepto de plasticidad neuronal.

La novedad, más allá del profundo conocimiento de las interconexiones neuronales que nos demostró, fue el de enriquecer este conocimiento con las consideraciones de la vida emocional que surgen del estudio profundo de la mente que nos ofrece el psicoanálisis. Desde el psicoanálisis llegamos a constataciones empíricas que los estudios neurológicos terminan por demostrar, como no podía ser de otra manera.

Una de estas constataciones es la relación entre la pobreza de representaciones mentales para los afectos y de mecanismos de descarga de forma normal o mediante mecanismos neuróticos o psicóticos, y la aparición de enfermedades somáticas. Los síntomas somáticos parecerían ocupar el lugar de las emociones faltantes, o que echaríamos de menos en las circunstancias en las que ha devenido su aparición.

En lugar de la tristeza, dolor, rabia, ternura, excitación o cualquiera que sea la emoción esperable encontraremos la emergencia de una expresión somática habitualmente típica y reiterada en la persona de que se trate.

Sifneos y Nemiach no sólo describieron la alexitimia, pobreza de representaciones para los afectos, solo que descubrieron mediante radiografía de positrones, que había menos conexiones entre la zona de la amígdala-hipocampo y el cortex cerebral, como no podía ser de otra forma. Si alguien no ejercita la musculatura tiene menos fibras musculares que quien lo hace. Sólo que tomaron causa por consecuencia y creyeron que la causa de la alexitimia era el déficit de comunicación neuronal.

Entendemos nosotros a partir de los estudios de Pierre Marty, que hay una falta de construcción de recursos mentales para identificar y procesar normal o neuróticamente los afectos y que estas carencias vienen siendo sustituidas por manifestaciones somáticas que habitualmente afectan a las áreas de mayor fragilidad que la genética individual propicia para cada persona.

Estas constelaciones se fraguan en la primera infancia. Los fallos afectos y la vida psíquica en general termina de construirse en lo que llamamos función materna, sea quien sea el que la ejerce, madre, padre o persona encargada de la crianza que acompaña el día a día y minuto a minuto del bebé.

Se evidenciaron numerosas manifestaciones patológicas de la primera infancia, como el cólico del primer trimestre, el insomnio, el espasmo de sollozo, la anorexia, las primeras reacciones asmáticas y así mismo su repercusión en edades posteriores, especialmente en la adolescencia. Se encontró que el inicio estaba ligado a perturbaciones de diferente orden de la función materna.

En esta línea hemos seguido investigando y hemos encontrado lo que llamamos trastornos por memoria humoral. Entendemos que la construcción aberrante de reacciones afectivas en la función materna en la primera infancia creará fijaciones definitivas que darán lugar a las reacciones sustitutivas del afecto que según hemos postulado con anterioridad aparecerán en lugar de los afectos faltantes en las personas que no los han creado o han perdido capacidad para expresarlos.

“Construcción del psicoma en el desarrollo temprano”, “Vision desde la pediatría de la memoria humoral”, “Correlatos clínicos y psicosociales de los trastornos psicósomáticos de la infancia en el hospital infantil y “Expresión de los trastornos por memoria humoral en la etapa adolescente”; constituyen nuestros aportes mas recientes a esta investigación.

PT-083

Mental health care necessities among paroled young offenders: preliminary results from a pilot clinical program

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Introduction: Prevalence of criminal behavior in adolescents is higher than in other stages of life. Some clinical and socio-demographic factors such as impulsiveness, low IQ, parental attitudes (poor oversight, punitive or erratic discipline), physical abuse, disruptive or large families, low education, low family income, and antisocial attitudes in parents, peers and neighborhoods, also increase these rates (Hoeve M 2012; Murray J 2012).

Objectives: We aimed to describe prevalence of psychiatric disorders and associated socio-demographic and clinical factors among adolescent patients referred at the Psychiatric Care for Young Offenders Program (PCYOP) conducted at the Department of Child and Adolescent Psychiatry, Gregorio Marañón General University Hospital (Madrid, Spain).

Methods: We collected socio-demographic (age, gender, academic level, absenteeism, type of rearing, religious beliefs, income, family structure) and clinical diagnosis from medical records of adolescents (age between 15 and 20) consecutively referred to the PCYOP from June 2013 to November 2014 (N = 14). Referrals were made by psychologists or youth parole technicians after detecting mental symptoms in paroled adolescents. We performed descriptive statistics using SPSS 20.

Results: Prevalence of mental disorders was 93 % (N = 13) among youngsters referred to the PCYOP. The mean number of diagnoses per patient was 2.64 (SD 1.95). Ten patients had depressive disorders (71 %), 7 ADHD (50 %), and 4 borderline personality disorder (28 %). Regarding socio-demographic factors, 43 % (N = 6) lacked family accompaniment in the early stages of treatment, 78 % (N = 11) had incomplete nuclear families, and 28 % (N = 2) had been raised in an institution. In addition, 85 % (N = 12) of the subjects had low academic performance, 70 % (N = 10) met criteria for substance use disorders, and nearly one-third had suffered traumatic experiences (14 % (N = 1) sexual abuse and 28 % (N = 2) physical abuse).

Conclusions: Our results were concordant with previous literature about young offenders (Hoeve M 2009). However, they are based only on data from the 10 % of paroled youth from the targeted population that have been referred to the PCYOP, underscoring the need of improving detection of mental health problems in this population. To that end, we are developing a screening tool to be used by young offenders' agency professionals to improve detection of psychiatric disorders and facilitate access to mental health care among paroled youth.

PT-084

Microsatellites in the 5' flanking region of AVPR1A were associated with social behavior scales of autism spectrum disorder

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Background: Impairment in social interaction and communication is core features in autism spectrum disorder (ASD). The arginine vasopressin receptor 1A gene (AVPR1A) is widely expressed in the brain and is considered to be a key mediator for regulation of social behavior. Evidence from numerous organisms implicates relationship

between microsatellites of the 5'-flanking region in the arginine vasopressin receptor 1A gene (AVPR1A) and social behavior and genetic variation at AVPR1A has been reported to be associated with autism.

Objectives: The objective of this study is to evaluate the relationship between microsatellites in the 5' flanking region AVPR1A and specific social phenotypes of ASD.

Methods: Two microsatellites (RS3 and RS1) in the 5' flanking region of AVPR1A were examined in 218 Korean family trios comprising children with ASD and their biological parents. Behavioral phenotypes are derived from comprehensive measures of the behaviors, using Social Communication Questionnaire (SCQ), Asperger Syndrome Diagnostic Scale (ASDS), Social Responsiveness Scale (SRS), Child Behavior Checklist (CBCL), Autism Diagnostic Observation Schedule (ADOS), Autism Spectrum Quotient (AQ), Empathy Quotient (EQ) and Systemizing Quotient (SQ). In the family-based association test and haplotype analysis using FBAT, we tested association between microsatellites and 28 quantitative traits related with social behaviors. Potential confounding effects, including age, sex and IQ, were controlled as covariates.

Results: We found a statistically significant association ($P < 0.05$) between microsatellites and multiple scales related with social behaviors. RS1 is significantly associated with 18 phenotypes (p 's = 0.049–0.004) and RS3 markers with 5 phenotypes (p 's = 0.043–0.012). Both markers are significantly associated with Social domain score in ASDS (RS1: $P = 0.004$; RS3: $P = 0.012$) and AQ (RS1: $P = 0.034$; RS3 = 0.022). Total seventeen phenotypes were significantly associated in haplotype association analysis (p 's = 0.049–0.009).

Conclusion: We observed significant relationship between microsatellites and specific social behaviors in Korean ASDs. Our results support that RS1 and RS2 microsatellite markers AVPR1A gene can be possible candidates for diagnosis for social behavioral dysfunction and autistic trait of ASD.

PT-085

Monitoring antipsychotics side effects in children: program development

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Introduction: The use of antipsychotics in child and adolescents has significantly increased in the last years, and more research is done to assess safety and efficacy in paediatric population. Nevertheless current clinical practice does not always count with specific programs or tools to monitor side effects on standard basis following clinical practice guidelines.

Objective: To develop a program that prevents and detects antipsychotic adverse events for an outpatient child and adolescent mental health service.

Methods: We searched in PubMed the articles published in the last 10 years about monitoring antipsychotics side effects in children and other safety concerns. Besides were viewed the clinical practice guidelines of the principal professional associations in Europe and USA. We selected items to be included in our programme because of the consensus around them in the literature and for their clinical impact: severity and frequency.

Results: Our programme is based on regular visits to nurse consultation, once psychiatrist prescribes treatment with antipsychotics. We developed a checklist with all the items that should be monitored at

base line and on regular follow up visits (3, 6 months, annual). In case of adverse effects psychiatrist will be informed in order to adjust or change treatment. Psychiatrist will assess treatment response and any side effects in each visit during the therapeutic process as established in guidelines, and will review analytics results and EKG.

Conclusions: This program would help monitoring side effects, early intervention in case of adverse event and would provide a closer relation with the centre, as nurse becomes a reference for patients and their families, and these would help treatment adherence. Further investigation is required to assess the results of the application of the programme.

PT-086

Multisystemic approach in treatment of risk sexual behaviors in clinical adolescent population

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Risk sexual behaviors (defined and categorized) are common in developmental population with devastating consequences especially in clinical subpopulations. The noxious influences of such behaviours disturb not only somatic and psychological wellbeing but also damage personal development, family system, neighborhood/social context and peer relations. The development of sexuality, when saturated with dynamic cognitive, emotional and behavioral disorders exposes the child to the risk of sexual abuse, changes his/her mental activity and behaviours as well as parental and milieu's perceptions of the child. Risk sexual behaviours misunderstood separately from the specific disease can lead to worsening of basic mental condition, primary affected by mental disorder or intellectual disability. The author describes own experiences in treating young people affected with some mental illnesses (BD, schizophrenia, ADHD, OCD, intellectual disability) and revealed risk sexual behaviours. The key ensuring optimal solution is multisystemic approach based on family and its resources. Psychotherapeutic work with parents aimed at proper understanding of sexuality of young people, natural way of psychosexual development and the interference with psychopathological signs and symptoms of basic mental illness as well as exploration of parental attitudes and patterns of their own sexuality are essential. The role of social context (peer groups, school settings and environmental influences—religious and mass culture in particular) are considered. The most important factor, however is the existence of the stable warm relation of the child with at least one significant adult—parent, grandparent or else, whose unconditioned acceptance supported the child.

PT-087

Munchausen syndrome by proxy with psychiatric features: a case report. Diagnostic and management challenges

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Munchausen syndrome by proxy, as well known as factitious disorder imposed on other (DSM-V), is a form of a child abuse, in which a caregiver (typically a mother) fabricates, exaggerates, or induces health problems in her own child, in order to gain the attention of medical providers and others. Usually the main intention of this

behavior is to please her own psychological needs. Even though, the most often fabricated symptoms are somatic, in some cases they can be psychiatric. We would like to present one of these cases. A female patient, 14 years old, arrived to children and adolescence clinical psychiatry unit, having complaints of eating disorder and depression. The girl was referred to a psychiatric ward for the second time. The primary diagnosis was bulimia nervosa and moderate depressive episode. During the first interview, it was noticed that the mother-daughter relationship is disturbed. Family anamnesis was complicated: grandmother of a patient had schizophrenia, mother was raped and sick with severe depression. However, during the assessment of patients mental state and family relationship, the hypothesis was formulated, that the mother herself is fabricating the symptoms of depression—maybe she has Munchausen syndrome?

During hospitalisation, we ascertained that the girl didn't have any symptoms of previously diagnosed illnesses, her behaviour in absence of her mother was adequate.

In this case report we present diagnostic and management challenges of this syndrome, especially one ethical problem of management. This is parentectomy—separating the child from his parent/abuser—does it help or does it cause more psychological problems for the child?

Keywords: Munchausen syndrome by proxy, Manifestation with psychiatric features, Disturbed mother-daughter relationship, Parentectomy.

PT-088

On the borders between residential child care and mental health treatment in Europe: development and evaluation of an international pilot course to enhance inter-professional collaborative practice

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Good cooperation between mental health and child and youth welfare services increases the quality of care for children and young people with complex needs. A variety of factors have an impact on the cooperation between both systems, such as professional roles and responsibilities, as well as service structures and cultures that guide treatment and care. In the EU-project RESME (On the Borders between Residential Child Care and Mental Health Treatment; 2012–2015), universities and service providers in six different countries explored the interface between child and adolescent psychiatry and residential child care. Looked after children and young people are particularly reliant on effective collaborative practice, as the majority of this population has experienced traumatic events such as dysfunctional families, neglect, and/or sexual or physical abuse, often over a prolonged period of time. Cooperative practice on the borderline between residential child care and mental health services, however, can pose a challenge for members of both systems. As part of this international research study, mental health and residential child care professionals in each country were interviewed, using semi-structured interviews, in order to better understand the logic of common conflicts arising in working together (Groen/Jörns-Presentati 2014). This qualitative data formed the basis of developing an educational curriculum, which aims to foster collaboration through inter-professional learning. It addresses relevant issues such as mental health diagnostics, trauma or daily working procedures in residential group homes using practice-based case studies. The professionals involved are encouraged to use their experience, acquire new information and skills and use critical reflection and appraisal to integrate new knowledge into practice. Pilot courses were conducted and

evaluated in all six countries with 157 professionals working in child and adolescent psychiatry and residential child care. A range of aspects were thought to be particularly helpful by participants, such as: being given an opportunity to network, to exchange experiences, to discuss case studies with an interdisciplinary perspective, to work shadow, and to engage with relevant research literature. The experience gained from implementing the pilot courses and the results of the evaluation suggest that adult learning classes are a useful learning approach to improve skills and competences relevant for professionals working at the boundary between child and adolescent psychiatry and residential child care.

PT-089 Parenting styles and childhood generalized anxiety: a conceptual model based on gender differences

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Anxiety disorders are the most common psychiatric disorders during childhood and show low levels of spontaneous remission, specifically Generalized Anxiety has quite a chronic course. Therefore, it's fundamental to work on its prevention, as well as its treatment.

The main motivation of this study is to contribute in the knowledge of risk factors involved in Generalized Anxiety origin, highlighting how parental components affect depending on child's gender. This work explores the mediating role of parenting, between parents' emotional symptoms and child generalized anxiety.

We used a cluster sampling procedure with all the schools in the Osona region (Catalonia, Spain) and 29 schools were selected randomly. Participants were 342 girls and 361 boys, aged between 6 and 8. Parents or caregivers (mainly mothers) answered questionnaires about their rearing style (EMBU-P), about their symptoms (QSG-28) and about child symptoms (CSI-4).

According to the principal aim of this investigation, the sample was divided into subsamples, depending on subject's sex, analyses were realized separately in each one and two Structural Equation Models were created.

More relevant results were, firstly, the emotional warmth mediating role, between the mothers' depressive symptoms and the minors' generalized anxiety, only in girls. Secondly, the mediating role of control, between mothers' anxiety and kids' generalized anxiety, in both sexes.

More research is needed in this area, but until now we could explain these results referring to some temperamental and emotional gender differences, like anxiety sensitivity.

Finally, we emphasize the importance to include a parental component in childhood anxiety treatment.

Keywords: Emotional warmth, Control, Parenting styles, Generalized anxiety, Gender differences

PT-090 Possibilities of hippotherapy application in complex child mental health improvement

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Introduction: Hippotherapy (derived from the Greek, hippos—horse + therapeia—treatment, syn. Therapeutic horse riding) is treatment

and nurture aided by a horse. Hippotherapy has an overall effect on human organism, so it could be applied in treating children and adults with various health disorders. Usually horse riding and interaction with horses is useful for patients who have movement disorders or mental developmental disabilities.

Aim of the study was to overview hippotherapy literature and its therapeutical mechanisms, investigate parent attitudes towards therapeutic riding and its impact on their children and describe one clinical case report.

Methods: Complexity of therapeutic aspects comprising horse, child, instructor interactions were analyzed. Pilot study of 10 parents attitudes was implemented using questionnaire developed by authors together with separate interviewing of children and adults in the society about their knowledge and attitudes towards hippotherapy. A case clinical report of a seven-year-old autistic boy during hippotherapy sessions is described.

Results: Hippotherapy is distinguishable by its profound physical, psychological, social and educational influence on people. The presentation overviews hippotherapy mechanisms and possibilities as well as the results of the survey on parent very positive attitudes towards hippotherapy. 290 people (170 children, 120 adults) were interviewed using questionnaire developed by the authors. Data will be presented. However, despite very strong horse-human bond in Lithuanian culture, hippotherapy is not very well known and used in work with children. Respondents suggested that there should be more information about therapeutic riding and it should be more available. It was also suggested that hippotherapy could be used as a rehabilitation method for children starting from a very young age.

Conclusions: All members of therapeutic riding team, including the instructor, the child and the horse, and their interactions are all nearly equally important in therapeutic process. The analysis of the survey results reveals that society is not adequately informed about hippotherapy and its application possibilities.

PT-091 Preliminary findings on proinflammatory and oxidative stress dysregulation in early-onset bipolar disorder

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Background and objectives: Bipolar disorder (BD) is associated with activation of several components of the immune response and inflammation markers. A recent meta-analysis in adults found that lipid peroxidation, DNA/RNA damage, and nitric oxide were significantly increased in patients with BD compared to healthy controls, supporting the implication of oxidative stress in the pathophysiology of the disorder (Brown et al. 2014). Increase in interleukins and TNF- α levels relative to controls is present in adults in early stages of bipolar I, having been hypothesized that variation in inflammatory response may be a marker of disease progression (Kauer-Sant'Anna et al. 2009). Data in children and adolescents although in the same direction, are still sparse and in need of replication (Goldstein et al. 2011).

The aim of this work is to study a clinically representative sample of children and adolescents with bipolar disorder and to explore differences in oxidative stress and inflammation markers with a group of healthy controls.

Methods: We assessed 9 children and adolescents with bipolar disorder and 11 sex- and age-matched healthy controls. Participants underwent a complete clinical evaluation and DSM-IV diagnoses were obtained by means of the K-SADS-PL. Cytokine levels (TNF α , Interleukin-1 β) and COX by-products (PGE2, 15d-PGJ2) were measured by enzyme immunoassay, lipid peroxidation was determined by TBARS assay, based on the reaction of malondialdehyde (MDA) and thiobarbituric acid (TBA) under high temperature (95 °C) and acidic conditions, and nitrites (NO₂) were measured by using the Griess method. All determinations were performed at Synergy 2, BioTek. Categorical variables were compared with Chi square test. Quantitative variables were compared using non-parametric Mann-Whitney test. SPSS 20.0 was used.

Results: Patients and controls did not differ regarding sociodemographic characteristics. Mean (SD) age was 15.44 (1.94) for patients and 13.81 (3.42) for controls ($p = 0.256$). Regarding gender distribution, 5 patients and 7 controls were male ($p = 0.714$). We found statistically significant differences between patients and controls in MDA (patients 4.85 (2.92), controls 1.28 (0.50), $p = 0.023$) and TNF α (patients 2.88 (0.07), controls 2.12 (0.13), $p = 0.001$) determinations and a trend for statistically significant differences in IL1 β (patients 9.59 (4.1), controls 6.07 (2.89), $p = 0.078$).

Conclusions: These data support a state of proinflammation in adolescents with bipolar disorder and suggest possible new targets for the development of therapeutic interventions in this clinical population.

References

- Brown et al. (2014) *Psychiatry Res* 218(1–2):61–68.
 Kauer-Sant'Anna et al. (2009) *Int J Neuropsychopharmacol* 12(4):447–58.
 Goldstein et al. (2011) *J Child Adolesc Psychopharmacol* 21(5):479–484.

PT-092

Preschoolers' empathy-related responses to distress in social partners

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In this study, parental reports of dispositional empathy and sociability were related to preschoolers' responses to distress shown by social partners. Examining how empathic behaviors relate to personality dispositions may inform how children develop empathy and socio-emotional competence.

Thirty preschoolers (13 females and 17 males, mean age = 3.89, SD = 0.89) and parents were observed in a laboratory setting. Parents completed the Griffith Empathy Measure (GEM, Dadds et al. 2008) and the Behavioral Inhibition Questionnaire (BIQ, Bishop, Spence, & McDonald 2003). Children were observed in three conditions (approximately 90 s each) in the same order: 1. the Parent condition (parent feigning a finger injury), 2. the Stranger condition (stranger feigning stomach ache), and 3. the Infant condition (mannequin in a bassinet with playback of infant crying sounds).

Behaviors were coded into 1. other-oriented behaviors indicating empathic concern for the victim (e.g., concerned looking or comforting) and 2. self-oriented behaviors indicating personal distress (e.g., clasp hands or comfort seeking). Frequencies of behaviors per minute were tabulated. Inter-observer reliability (ρ) ranged from 0.95 to 0.98.

More other-oriented than self-oriented behaviors were observed, $t(29) = 3.89$, $p < 0.0005$. Parental distress elicited more other-oriented

behaviors than stranger and infant distress, $t(29) = 7.43$, $p < 0.0001$, and $t(29) = 4.71$, $p < 0.0001$, respectively. Further, infant distress elicited more other-oriented behaviors than stranger distress, $t(29) = 2.84$, $p < 0.005$. Frequency of self-oriented behaviors towards parental distress was lower than that towards stranger and infant distress, $t(29) = -1.88$, $p < 0.0001$ and $t(29) = -3.68$, $p < 0.0005$, respectively.

Boys exhibited more self-oriented behaviors than girls in the Parent condition, $t(28) = 1.77$, $p < 0.05$. Parents reported higher levels of affective empathy, but lower levels of cognitive empathy in girls than in boys, $t(28) = 2.31$, $p < 0.05$, and $t(28) = 2.36$, $p < 0.05$, respectively. Girls' cognitive empathy predicted parent-oriented empathic responses, $r = 0.87$, $p < 0.0001$. Girls' self-oriented distress in the Infant condition was predicted by cognitive empathy, $r = -0.58$, $p < 0.05$, and performance social novelty inhibition (a BIQ subscale), $r = 0.76$, $p < 0.005$. Boys' total scores of GEM predicted stranger-oriented empathy, $r = 0.54$, $p < 0.05$, and total scores of BIQ infant-oriented empathy, $r = -0.50$, $p < 0.05$. Surprisingly, boys' cognitive empathy negatively predicted parent-oriented empathy, $r = -0.62$, $p < 0.008$. The findings carry implications for fostering empathy and socio-emotional competence.

PT-093

Prevalence of ADHD in a clinical sample according to DSM-5

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Introducción: El trastorno por déficit de atención con hiperactividad es el trastorno del neurodesarrollo más prevalente, con cifras que oscilan entre el 3–7 % de menores de 16 años en población general. En la nueva clasificación de los trastornos mentales y del comportamiento DSM-5 se introducen una serie de cambios a nivel diagnóstico, entre los que destacan la posibilidad de coexistir dicho trastorno con el trastorno del espectro del autismo, la existencia de especificadores y la posibilidad de diagnosticar el trastorno si aparece los síntomas antes de los 11 años de edad, a diferencia de los 7 años que marcaba como edad mínima el DSM-IV. La modificación en el criterio edad de aparición de sintomatología ha sido duramente criticada, en especial porque se cree que puede aumentar considerablemente la prevalencia del trastorno. (DSM-5, American Psychiatric Association 2013).

Objetivos: Determinar cuántos pacientes con diagnóstico de Trastorno por Déficit de Atención con Hiperactividad aplicando criterios DSM-5 mantendrían el diagnóstico si aplicáramos los criterios necesarios según el DSM-IV, con especial referencia al criterio de edad para aparición de la sintomatología.

Material y Métodos: Realizaremos revisión de historias clínicas de 70 pacientes de nuestra Unidad durante el año 2014.

Resultados: El estudio se está realizando en el momento actual.

PT-094

Prevalence of at-risk criteria of psychosis in children and adolescents, and in young adults: results from two swiss community samples

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Background: Questionnaires cannot be considered a valid assessment of attenuated psychotic symptoms (APS) and tend to greatly overestimate their prevalence in the community. Thus, the prevalence and pathological value of APS in the general population, when assessed in the same way as in help-seeking persons, is still rather unclear. This lack of knowledge also exists for other risk criteria, especially basic symptom criteria. For APS and related risk criteria, data from Irish youth have suggested an age effect with declining rates of (attenuated) psychotic symptoms in early to mid-adolescence, and a predominance of perception related phenomena.

Methods: In two complimentary community studies, we studied the prevalence of ultra-high risk and basic symptom at-risk criteria and their included symptoms assessed with the Structured Interview for Psychosis-Risk Syndromes (SIPS) and the Schizophrenia Proneness Instrument, Adult version (SPI-A) and Child and Youth version, respectively, in random Swiss general population samples of 8–17 and 16–40 years. Children and adolescents were assessed in face-to-face interviews, young adults on the telephone by trained clinical psychologists. Exclusion criteria were communication problems and life-time psychosis.

Results: At the time of writing, 1229 interviews with young adults (18–40 years) and 55 interviews with children and adolescents (8–17 years) were completed. While only 2.8 % of the young adults acknowledged the presence of any one at-risk criterion (incl. frequency and onset requirements), 9.1 % of the children and adolescents did so ($\chi^2 = 3.34$, $p < 0.10$). An even more pronounced, significant age-related difference was found in the prevalence of lifetime at-risk phenomena ($\chi^2 = 5.83$, $p < 0.025$): 25.2 % of the young adults and 45.5 % of the children and adolescents reported at least any one. Thereby, “perceptual abnormalities/hallucinations” of the SIPS, mainly on APS level, were the most frequent phenomenon in both samples.

Discussion: While at-risk phenomena occurred in a quarter of young adults of the general population and even in nearly half of the children and adolescents at least temporarily, only a minority reported sufficient recency, frequency or change in severity of these phenomena to meet present risk criteria according to SIPS and SPI-A—again with higher rates in children and adolescents. This highlights the importance of the recency, frequency or behavior-/conviction-related change-in-severity criteria included in the risk criteria, but also the need to further examine developmental peculiarities.

PT-095 Prevalence of psychiatric illness in parents of children treated

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Introduction: Children and adolescents whose parents suffer from depression and anxiety are at high risk for developing their own psychiatric symptoms and disorders. Top-down studies assessing offspring of parents with lifetime symptoms as compared to non-symptomatic parents and bottom-up studies comparing first-degree relatives of psychiatrically ill and non-ill children have demonstrated significantly higher rates of psychopathology in children and parents, respectively. Given the relationship between parent and child psy-

chopathology, the clinical evaluation should include screening for mothers and fathers symptoms of depression and anxiety at the time of their child’s evaluation. It gives the clinician an opportunity to engage parents in a dialogue about the relationship between their symptoms and their child’s treatment outcomes, the potential benefits of seeking their own treatment, and referral options. However, it is not standard practice to screen parents of children undergoing psychiatric evaluation

Objective: The aim of our study was to determine the prevalence of Psychiatric illness in parents of children treated in our mental health service during the month of December.

Method: We are collecting data from two psychiatric consultations during December. There is an average of eight patients every day, both initial and reviews. We expected to get a sample of 320 patients. A short questionnaire collects data regarding gender, age, patient diagnosis and parents diagnosis. Only parents actually undergoing psychiatric treatment were registered.

Results: The data collection process is taking place during December. Initial data shows that 55.55 % of patients surveyed have parents with Psychiatric. Provisionally, the most frequent fathers diagnosis is anxiety disorder. While the most frequent maternal diagnoses are anxiety and depressive disorder in the same proportion. In addition 30 % of patients with psychiatric family history have both parents diagnoses and the most frequent diagnosis is anxiety disorder. Diagnosed at the same time, the most frequent diagnosis is anxiety.

Conclusions: Little research has focused on screening parents bringing their children for psychiatric evaluation. This study highlights the importance of screening parents when their children receive a psychiatric evaluation. It supports the development of mental health services that addresses psychiatric needs of the entire family within one clinical setting.

PT-096 Prevalence of psychosis-risk criteria and symptoms in an inpatient and general population sample of children and adolescents

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Background: For adolescents from the community in defined age-ranges (11–13 and 13–15 years of age), increased prevalence rates of attenuated psychotic symptoms (APS) and positive symptoms were recently reported. The two Irish studies indicated an age effect: 22.6 % of the younger sample reported APS or positive symptoms, especially (attenuated) hallucinations, as compared to 7 % of the older age group. In the younger sample, APS-related risk criteria were met by 7.7 %. Furthermore, APS were related to a higher psychiatric morbidity. Thus, APS and possibly other risk criteria and symptoms might be even more frequent in clinical child and adolescent samples, even if the clinical picture does not suggest the possible development of psychosis.

Methods: We studied the prevalence and possible clinical impact of risk criteria and symptoms according to the ultra-high risk (UHR) and basic symptom (BS) approaches in an inpatient (ClinS) and a general population sample (GPS) of 8-17-year-olds (at the time of writing: ClinS: N = 41; GPS: N = 55). The inpatient sample comprised 5 diagnostic groups for that increased rates of subsequent psychosis had

been reported: Eating ($n = 19$), ADH ($n = 6$), Anxiety ($n = 5$), Obsessive Compulsive ($n = 5$) and Asperger's ($n = 6$) Disorders.

UHR and BS criteria and the included 19 symptoms were assessed with the 'Structured Interview for Psychosis-Risk Syndromes' (SIPS) and the 'Schizophrenia Proneness Instrument, Child and Youth version' (SPI-CY), and psychosocial functioning with the 'Social and Occupational Functioning Assessment Scale'.

Results: Only 1 patient of the ClinS (2 %), but 5 persons of the GPS (9 %) acknowledged the presence of any one at-risk criterion. Additional 15 inpatients (37 %) and 25 subjects of the GPS (46 %) acknowledged at least any 1 past or present risk symptom. Thereby, "perceptual abnormalities/hallucinations" of the SIPS and SPI-CY, were by far the most frequent phenomenon in both samples.

Discussion: Currently used risk symptoms—particularly when related to perception—are frequent in children and adolescents with severe mental disorders requiring inpatient treatment and in youths from the community. Since risk criteria have predominately been developed in adult samples in that perceptual phenomena are much less frequent, the findings call for further studies on the psychopathological significance of risk symptoms in children and adolescents.

PT-097

Prevención de los Trastornos Mentales en la Infancia

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La prevención de los trastornos mentales es una prioridad de salud pública, debido a la importante carga a nivel socio-económico y su repercusión en el bienestar de las personas. Se considera que 1/5 de los adolescentes menores de 18 años padece algún problema de desarrollo, emocional o de conducta y 1 de cada 8 tienen un trastorno mental (1 de cada 5 en poblaciones de riesgo).

Dar a conocer algunos de los programas de prevención de los trastornos mentales en la infancia, ya desarrollados e implantados, y difundirlos para poder adaptarlos y aplicarlos en nuestra área, es el objetivo de esta presentación.

La OMS ha prestado gran atención a la Salud Mental, desde 1998 ha publicado varios documentos sobre promoción de la salud mental y prevención primaria de los trastornos mentales, potenciando la creación de estilos de vida saludables y ambientes que favorezcan la salud, creando intervenciones de salud pública efectivas, sostenibles y con evidencia científica a nivel internacional. Existe una red Europea para la Promoción de la Salud Mental y la Prevención de los Trastornos Mentales: IMHPA, que agrupa a 29 países europeos, con el objetivo de recoger información sobre programas efectivos, ha elaborado una base de datos en Internet donde se describen los programas existentes, ha efectuado la difusión de instrumentos y conocimientos basados en la evidencia y ha llevado a cabo el plan de acción promoción de la salud mental y prevención de los trastornos mentales en la infancia.

Diferentes programas de ámbito europeo han demostrado su eficacia en la promoción de la salud mental y prevención de los trastornos mentales: Programa Prenatal y de la Infancia a través de Visitas al Hogar, Programas de capacitación para preparar a los padres en la crianza de los hijos (programa "Los Años Increíbles"), programa FRIENDS, programa de centros infantiles para niños en riesgo.

Una prevención efectiva puede reducir factores de riesgo, fortalecer factores de protección, disminuir síntomas y discapacidad,

reducir la aparición de algunos trastornos mentales, mejorar la salud mental positiva, la salud física, y generar beneficios sociales y económicos; demostrando que los programas de prevención son rentables.

PT-098

Providing psychiatric care for young offenders: a pioneer multi-disciplinary approach

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Introduction: European Comparative Analysis and Transfer of Knowledge on Mental Health Resources for Young Offenders emphasises the need to promote a multi-disciplinary intervention including judicial, mental health, and child protection system in these youngsters (<http://www.oijj.org>). Treating their psychopathology, besides improving patients' mental health, increases their chances of reintegration and prevents recurrence of criminal behaviour (Murray 2012; Asscher 2011). However, a continuum of care between detention and community mental health centers is missing. The Psychiatric Care for Young Offenders program was developed to provide a community-based psychiatric care for young offenders and facilitate their access to integral medical care.

Objectives: To describe the program and to assess the feasibility of its implementation.

Methods: Literature review and a collaborative process with stakeholders led to the design of a program aiming to fulfil psychiatric and health needs of young offenders within an urban area of 250,000 inhabitants in Madrid.

Results: The program was designed under the premises of facilitating patients' access to community mental health, promoting case management and coordination with the different professionals and institutions involved (mental health professionals, Agency for Rehabilitation and Reintegration of Young Offender, Police department, educational institutions, and social services), ongoing supervision of treatment plans, and collecting clinical and social data in a comprehensive and standardized way. Our program offers medical and psychiatric assessment, psychopharmacological and psychotherapeutic treatment, and a regular nursing care. We organize psychoeducative group interventions to promote mental health and general health, and enhance quality of the program by means of Balint groups. Satisfaction with the program is also assessed. From may 2013 to october 2014, 14 young offenders (15–20 years, mean 16.93) were referred to the program. Eight of them continue under treatment, and only 2 (conduct disorder and borderline personality disorder diagnosis) left after the first three consultations. Appointment absenteeism is 20 %. Satisfaction with the programme was high among professionals.

Conclusions: The Psychiatric Care for Young Offenders program is being developed successfully using the available mental health resources. Compliance of patients (80 %) and satisfaction of involved professionals are high. We are already working with concerned institutions to expand services to all Madrid area.

PT-099**Psychiatric disorders in parents and siblings of children diagnosed with autism spectrum disorder: findings from the Danish psychiatric central register**

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Introduction: Several studies have shown that different psychiatric disorders are more common among relatives of children with autism spectrum disorders (ASD), which may suggest an involvement of common genetic and familial factors.

Objectives: The aims of the current study are to confirm previous reports of increased diagnosed psychiatric disorders among parents of children diagnosed with ASD compared to controls. This study examines for the first time whether such pattern is present among siblings of ASD patients as well.

Materials and methods: Parents and Siblings of all singleton ASD cases previously identified in a Danish historic birth cohort along with their frequency-matched controls were analyzed for their psychiatric diagnoses relying on Danish nation-wide health registers over a follow-up period of more than 25 years ending on 01.09.2009.

Comparisons were performed using the Mantel-Haenszel estimates of the OR and Chi square tests controlling for gender and year of birth in the crude estimates, and also controlling for the following variables in the adjusted estimates: APGAR score, parity, maternal age, mental retardation and congenital malformation diagnoses.

Results and Discussion: Parents of children with ASD had a higher risk of being diagnosed with a psychiatric disorder compared to parents of controls. This was comparable in maternal [Odds Ratio (OR): 1.51; Confidence Intervals (CI): 1.10–2.09] and paternal (1.54; 1.06–2.25) estimates. Siblings of children with ASD also had a higher risk of being diagnosed with a psychiatric disorder compared to siblings of controls (2.04; 1.59–2.62). This was mainly driven by estimates of full siblings (4.54; 1.51–13.64) and lacked significance for only-paternal half siblings (1.16; 0.67–2.01).

Our results confirm previously reported findings that parental psychopathology is associated with ASD. Moreover, this study reports for the first time similar associations for siblings of ASD patients. Discrepant associations depending on biologic relationship of the siblings support theories of shared genetic susceptibility in ASD and other psychiatric disorders.

Keywords: Autism, Parents, Siblings, Psychiatric disorders.

PT-100**Radiography of the attendance and diagnosis in a childhood mental health service in a district in Madrid**

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We performed an analysis of all the children and adolescents in an outpatient setting between March and August 2014 from the data base

of child and adolescents psychiatry Unit of the Hospital Clínico San Carlos of Madrid.

3408 patients were attended during those 6 months; 22 % were first consultation and 78 % were reviews. 58 % were masculine patients and 42 % were feminine patients. Also, we found out that a third of the new patients were not coming to the medical appointment, whereas the absences in the reviews were approximately a fifth part.

The average of patients attended in a month was 418, whereas the median was 666. The month of minor assistance was August with 152 patients whilst March attended a total of 703.

The clinical diagnoses were codified using the CIE-10 (ICD-10: International Statistical Classification of Diseases and Related Health Problems): 29 % ADAH, 20 % Adjustment disorder, 15 % anxiety disorders, 10 % conduct disorders, 7 % affective disorders, and 20 % which included: Eating disorders, Personality disorders, Autism spectrum disorders, learning disorders...etc.

The most prevalent diagnosis were ADAH in boys (39 %) and Adjustment disorders (27 %). Anxiety disorders obtained similar percentages in both genders, between 14 and 17 %. Double of boys presented conduct disorders compared with the girls and there were also different results in the eating disorder diagnosis (10 % in girls opposite 1 % in boys). Personality disorders appeared the triple in girls that in boys.

These result agree with those found in the previous scientific literature, in which conduct disorders, affective disorders and ADAH are identified as the most frequent. However, we have found that the percentage of ADAH is higher in our study than it was in similar studies a decade earlier.

We conclude by pointing out the need for epidemiological studies as a way of improving the distribution of medical services and patient care.

PT-101**Readmissions to an adolescent psychiatry inpatient unit: readmission rates and risk factors**

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Introduction: Most mental disorders have a chronic evolution, therefore a certain amount of psychiatric readmissions at an inpatient unit are inevitable.

Several studies indicate that over 25 % of child and adolescent inpatients were readmitted within 1 year of discharge. More recent rates range from 30 to 50 % across studies.

Several risk factors for psychiatric readmissions have been reported in the literature: diagnosis of Psychotic or Personality Disorder, poor adherence to treatment, substance abuse, male gender and lack of occupation or family support. The history of repeated readmissions is the most consistent risk factor.

Our aim is to calculate the readmission rates at two instances, 30 days and 12 months after discharge, and to identify associated risk factors.

Methods: The authors consulted the clinical files of patients admitted to the Inpatient Unit between January of 2010 and December of 2013, over a 12 months period after discharge, in order to calculate de readmission rates at 30 days and at 12 months.

Also, the demographic and clinical characteristics of the readmitted patients were analyzed. The data collected were: gender, age, occupation, primary caregiver, district of origin, origin and reason for admission, length of hospital stay, number of previous psychiatric

admissions, presence of substance abuse, history of suicide attempts, family history of mental illness, diagnosis and post-charge care.

Finally, the results were compared with a second group of patients with no hospital readmissions, in order to investigate possible predictors of readmission at our psychiatric inpatient unit.

Statistical analysis was conducted with SPSS v.19.0 software.

Results: A total of 445 patients were admitted to our inpatient unit between 2010 and 2013. Six adolescents were readmitted in a 30 days period (1.3 %) and 52 were readmitted in a 12 month period after discharge (11.5 %).

The sample of patients with at least one readmission in a 1 year period post discharge consisted of 56 adolescents. The second group was composed of a similar number of patients without readmission during the same period of time. The comparative analysis is in progress.

Discussion/conclusion: This study provided us information to better understand the characteristics of the patients readmitted to our inpatient unit and enabled us to reassess the treatment being provided and the needs of our patients.

The low readmission rates may reflect the positive clinical and sociofamiliar support being provided after discharge.

Rehospitalisation is considered a fundamental target for intervention concerning the improvement of child-caring systems. Thus, knowledge regarding their minimisation is crucial.

PT-102

Reasons for referral and results of a high resolution consultation of adolescent

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Introduction: Up to the date, the studies on the demand of valuation to Mental Health of the child and the adolescent are scarce in comparing with those of the adult, turning out to be this showy fact if we observe the high prevalence of mental pathology in this population, estimated in 20 % according to the WHO.

Objetives: Analysis detailed from the derivations to mental health from the services of primary care, based in an adolescent High-Resolution consultation of our hospital, as well as the decisions taken to the medical discharge depending on final diagnoses.

Methodology: Cross-sectional descriptive and retrospective study of a consultation of high resolution of adolescent in our center, during the period included between January, 2013 and December, 2014.

Results: Only 171 patients out of the 229 patients referred from primary care attended the appointment (74 %). From those, 58 were discharged from mental health on the first appointment (35 %). The main reasons for referral were: 35 due to academic failure (22 %), 26 due to anxiety (16 %), 24 due to distressed behavior (15 %), 22 due to distressed mood (13 %), 19 due to eating disorders (12 %).

After the first interview 38 did not show mental pathology (22 %), 23 suffered an adaptative disorder (14 %), 20 dysfunctional personality traits which do not meet personality disorder criteria (12 %), 19 showed a depressive episode (11 %), 15 different anguish disorders (9 %), 17 eating disorders (10 %) and 11 hyperactive disorders (7 %).

Conclusions: The most frequent reason for referral was academic failure, major final diagnoses were related to the affective sphere, which therefore we consider to be basic to study and to reject that area if there are academic and behavioral problems.

More than a third of the patients had no mental illness, a fact that suggests an erroneous initial diagnostic affiliation, we believe could be improved the involution of strategies of coordination between mental health and primary care.

References

WHO (2005). Atlas child and adolescent mental health resources global concerns: Implications for future.

Aláez M, Martínez-Arias y R, Rodríguez-Sutil C (2000) Prevalencia de trastornos psicológicos en niños y adolescentes, relación con la edad y género. *Psicothema* 12:525–532

Costello J (2005) 10-year research update review: the epidemiology of child and adolescent psychiatric disorders: methods and public health burden. *J Am Acad Child Adolesc Psychiatry* 44(10):972–86.

Belfer M (2008) Child and adolescent mental disorders: the magnitude of the problem across the globe. *J Child Psychol Psychiatry* 49(3):226–36.

PT-103

Reduced prefrontal hemodynamic response in pediatric autism spectrum disorder as measured by near-infrared spectroscopy

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Functional neuroimaging studies have suggested that dysfunction of prefrontal cortex is present in persons with autism spectrum disorder (ASD). Near-infrared spectroscopy (NIRS) is a noninvasive optical tool for studying oxygenation and hemodynamic changes in the cerebral cortex by measuring changes in oxygenated hemoglobin. We hypothesized that children with ASD have reduced prefrontal hemodynamic response as measured by NIRS during the Stroop color-word task. Nine drug-naïve male participants, aged 8–13 years and diagnosed with ASD according to DSM-5, were compared with 9 age- and IQ-matched healthy control males, aged 7–12 years. The subjects with ASD was evaluated with PDDAS which was a Japanese semi-structured interview system for ASD. This study was approved by the Institutional Review Board at the Nara Medical University. Written informed consent was obtained from all participants and/or their parents prior to the study. The relative concentrations of oxyhemoglobin (oxy-Hb) were measured with frontal probes every 0.1 s during the Stroop color-word task, using 24-channel NIRS machine (ETG-4000). The participants were asked to adopt a natural sitting position for NIRS measurement. The oxy-Hb changes during the Stroop color-word task in the ASD group were significantly smaller than those in the control group at the channel 12, 13 and 18 located at prefrontal cortex (FDR-corrected P: 0.0021–0.0063). We found that the male children with ASD had reduced prefrontal hemodynamic response as measured by NIRS during the Stroop color-word task compared with the healthy control male children. Therefore, the present study supported our hypothesis sufficiently; the present findings are consistent with the proposed prefrontal dysfunction in adult ASD identified by NIRS. The present study suggest that the children with ASD have the prefrontal dysfunction.

Keywords: Autism spectrum disorder, Near-infrared spectroscopy, Functional neuroimaging study, Prefrontal hemodynamic response

PT-104**School refusal: family risk factors**

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Introduction: Roughly 5 % of referrals to child and adolescent mental health services present with school refusal associated with anxiety. It is a presenting complaint that can reflect a variety of problems in the child or adolescent—or in the family or school system as a whole. The child or adolescent either refuses to go to school or sets out for school but returns home shortly after arriving school or before school time is over.

Among the risk factors for school refusal (SR), there are familiar factors such as high anxiety and depression scores in parents, physical abuse by parents, a history of organic disease in the parents or children, and a history of psychiatric disorders in the parents or other relatives. The purpose of this study is to assess the levels of psychological symptoms in the parents of children with SR and determine familiar risk factors associated with development of SR.

Methods: This case-control study involved 50 pairs of parents who had children with SR admitted to the Department of Child and Adolescent Psychiatry, Centro Hospitalar do Porto, Porto, Portugal. Inclusion criteria to the study group were: having a child aged between 6 and 11 years with SR for at least 1 month. Parents of children that stay away from school to engage in other activities without parental permission, designed by “truants”; institutionalized children; children with serious organic disease, psychosis, autism spectrum disorders or mental retardation were excluded from the study. The control group included 50 volunteer pairs of parents of children without SR from a nearby primary health care centre. As instruments, the authors used an Socio-demographic Data Form; the Depression Anxiety Stress Scales (Portuguese Version) and the Parenting Styles and Dimensions Questionnaire, (Portuguese and Short Version). Data were analysed using the Statistical Package for Social Sciences, Windows Version 21.0.

Results/Conclusion: Parents of the school refusal group had higher anxiety and depression scores than the controls. Among the risk factors for school refusal, a history of organic disease in parents or children, and a history of psychiatric disorders in the parents or other relatives were found to be significant. The parenting style didn't demonstrate any statistically significant differences. This work demonstrates the great importance of family system in SR, and that prevention and treatment of SR should include the family too.

PT-105**Screen exposure in Tunisian child psychiatry consultants**

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Objective: Our purpose is to assess the exposure of Tunisian children aged from 2 to 5 years to different screens.

Methodology: This is a cross-sectional study conducted from August 20 to December 2014 on all first viewed children aged from 2 to 5 years at the Child Psychiatry Department of the Mongi Slim hospital, Marsa (Tunisia). Sociodemographic and clinical items were assessed. A questionnaire concerning exposure to different screens was completed with parents.

Results: 41 patients with a mean of 40.17 months (± 10.84 months) consulted our department with a sex ratio of 2.62. Our consultants attending a kindergarten in 58.6 % of cases, with an average age for the insertion of 30.65 months. The most frequent reason for consultation was the language delay (72.5 %). The diagnosis (DSM IV) was autistic disorder (41.3 %), pervasive development disorder NOS (17.24 %), a simple language delay (13.7 %) and mental retardation (6.8 %).

All families had at least one television set. The age of television exposure onset was 7.18 (± 6.49 months), with an increasing exposure over the semesters (3:29 in the 1st, 4:28 in the 2nd, 4:25 in the 3rd, 4:40 in the 4th). Regarding the habits, the children were watching TV along in 58.6 %, with other children in 33.5 % and in the presence of an adult only in 13.4 %. The children watched all the time the same chain in 58.6 %. 62.1 % of children ate in front of the television.

Exposure to other screens in our population was observed only in 13 cases, although 62 % of families had either a computer, a smartphone, a tablet or a video game console. For these children, the beginning of exposure was later to 29.33 (± 4.13 months) with a daily average of 2:14.

Conclusion: Screen exposure in our sample was massive with an early start. Recommendations to parents and early childhood professionals are needed in order to reduce exposure.

Keywords: Screen exposure, Children, Television.

PT-106**Secondary traumatization in offspring of male veterans with combat-related posttraumatic stress disorder**

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The term “secondary traumatization” refers to any transmission of distress from someone who experienced a trauma to those around the traumatized individual, and includes a wide range of manifestations of distress along with that resembling PTSD. Veterans' posttraumatic stress disorder (PTSD) following exposure to combat violence affects veterans' familial relationships and the psychological adjustment of family members. Veterans' numbing/arousal and anger symptoms are especially predictive of family distress, in particular troubled family relationships and secondary traumatization among family members.

Many studies have found that in comparison with children of combat veterans without PTSD, the children of combat veterans with PTSD have more frequent and more serious developmental, behavioural, and emotional problems. PTSD male veterans' children may display difficulties in one or more areas of functioning, including somatization, depression, anxiety, hyperactivity, delinquency, poor socialization, aggression, academic dysfunction and PTSD-like symptoms.

The influence of paternal war-related PTSD on offspring behavior problems is potentially complex, reflecting both heritable vulnerability to mental illness and multiple effects on childhood environment. Severe and diffuse problems in family functioning have been found in PTSD male veterans' families. Studies have also shown significant impairments in parenting for many PTSD male veterans.

Mother's secondary traumatization, family dysfunction and adverse parenting behaviors of both parents have been found to play a strong role in the development of emotional and behavioral problems including suicide attempts and non-suicidal self-injury among adolescent offspring of Croatian male veterans of the 1991–1995

Homeland War in Croatia with combat-related PTSD following exposure to combat violence.

Treatment programmes for offspring of PTSD male veterans with emotional and/or behavioral symptoms should include interventions targeting both adolescent psychopathology and family relationships.

Keywords: Male veterans, Combat-related PTSD, Secondary traumatization, Children, Emotional, Behavioral problems

PT-107

Sentia: a Spanish systematic online monitoring registry for children and adolescents treated with antipsychotics: results from a 2-year, naturalistic follow-up study

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SENTIA (SafEty of NeurolepTics in Infancy and Adolescence; (<https://sentia.es>), is an online Spanish registry created to track antipsychotic adverse effects in youth (<18 years old). SENTIA is financed by public and private funds from competitive calls. SENTIA is included in the European Network of Centres for Pharmacoepidemiology and Pharmacovigilance.

Objectives: SENTIA has the following aims: 1. Early detection and prevention of adverse events and pharmacological interactions. 2. Close monitoring and long term follow-up of pediatric patients on antipsychotic treatment. 3. Development of an extensive online pharmacovigilance database of antipsychotic treatment in children and adolescents.

Methods: Children and adolescents, regardless of the diagnosis or clinical symptoms that motivate the antipsychotics prescription are monitored regularly. The gathered information is structured as follows: 1. Sociodemographic data; 2. Medical and psychiatric history; 3. Clinical assessment: CGAS/CGI; 4. Pharmacological history; 5. Therapeutic compliance; 6. Health habits; 7. Side effects (AIMS, SAS, SMURF); 8. Physical examination, 9. Biological parameters.

Results: 96 patients have been enrolled, 11.4 ± 2.9 years old, 14 % are under 8 years-old, 75 % male. The most frequent clinical syndromes that motivate prescription are conduct disorder (38.5 %), ADHD (26.0 %) and autism spectrum disorders (24.0 %). The most frequently prescribed antipsychotics as first line treatment were risperidone (48.8 %) and aripiprazole (30.2 %). During the follow-up, 21 % of patients changed at least once the antipsychotic. In relation to safety assessments (SMURF scale), 85.4 % of patients had adverse events related to treatment (AEs) all were classified as mild or moderate AEs. The most frequent adverse effects were: problems related to appetite/weight (59.4 % of patients), tiredness and weakness (28.1 %), sleeping problems (22.9 %) and abnormal movements/tics (14.6 %).

36 patients have been exposed to antipsychotics for longer than 18 months (80 visits). Regarding specific adverse events in this group, the most frequent adverse effects were: headache, problems related to appetite/weight, hypersalivation and gastrointestinal problem. In relation to weight increase (% of visits with BMI Percentile >85) 66 % of visit with risperidone had BMI > 85 vs 0 % with aripiprazole.

Conclusions: The creation of an online Pharmacovigilance Registry (SENTIA) is a useful tool in the longterm systematic assessment of adverse events in the antipsychotic treatment of children and adolescents that contributes to the increase of knowledge about the still too limited knowledge about medium-and long-term safety evidence in real-world pediatric population. Results of SENTIA 18-months follow-up shows persistence of mild-moderate but potentially risky AEs that deserves and justify a close clinical monitorization of tolerability and safety of APS in children and adolescents. Comparative naturalistic data will enhance clinician's knowledge and decision making ability when choosing and implementing antipsychotic treatment in youth.

PT-108

Sexual abuse predicts functional somatic symptoms: an adolescent population study

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Background: Functional somatic symptoms (FSSs), symptoms that are not well explained by an underlying pathology, are common in adolescents and can be persistent and impairing. Sexual abuse is thought to be a risk factor for FSSs. However, previous studies often focused on the cross-sectional relation of recalled sexual abuse with gastrointestinal FSSs in adult clinical populations. This may have introduced report biases.

Objectives: To study the effect of childhood sexual abuse on a spectrum of FSSs in the general adolescent population. We hypothesize that sexual abuse predicts the level of FSSs and that anxiety and depression contribute to this relationship. In addition, we hypothesize that more severe abuse is associated with higher levels of FSSs and that sexual abuse is related to gastrointestinal FSSs in particular.

Method: This study was part of the Tracking Adolescents' Individual Lives Survey (TRAILS): a general population cohort which started in 2001 (N = 2230; 50.8 % girls, mean age 11.1). The current study uses data of 1680 participants over four assessment waves (75 % of baseline, mean duration of follow-up: 8 years). FSSs were measured by the Somatic Complaints subscale of the Youth Self-Report at all waves. Sexual abuse before the age of sixteen was assessed retrospectively with a questionnaire at T4. To test our hypotheses linear mixed models were used. The association of sexual abuse with FSSs was adjusted for age, sex, socioeconomic status, anxiety and depression.

Results: Sexual abuse predicted higher levels of FSSs after adjustment for age, sex, and socioeconomic status (b = 0.06, 95 % CI = -0.04–0.08), and after additional adjustment for anxiety and depression (b = 0.03, 95 % CI = -0.02–0.05). While sexual abuse involving physical contact significantly predicted the level of FSSs (assault: b = 0.08, 95 % CI = -0.05–0.12; rape: b = 0.05, 95 % CI = -0.03–0.08), non-contact sexual abuse was not significantly associated with FSSs (b = 0.04, 95 % CI = -0.05–0.12). Sexual abuse was not a stronger predictor of gastrointestinal FSSs (b = 0.06, 95 % CI = -0.04–0.08) than of all FSSs.

Conclusion: In this study sexual abuse was related to higher levels of FSSs in adolescents. Further research is needed to clarify possible mechanisms underlying this association.

PT-109 Showing practical skills in child and adolescent psychiatric evaluation

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Objectives: The objectives of this workshop are two: 1. To teach how to make in an easy way a child and adolescent psychiatric evaluation. 2. Highlight the usefulness of acquiring practical skills in the coordination with other professionals involved in preventive care.

Method: In Carabanchel Mental Health Centre of Madrid we have developed two specific protocols: one for initial clinical patient data collection and the other to obtain information from school environment. In more than three decades of child and adolescent psychiatric practice we have seen how thanks to the use of these protocols it has been achieved both a greater accuracy in childhood psychiatric diagnosis and a more effective prevention and treatment. This is a workshop of practical nature, where using four cases we can conduct 'role-playing' that serves as an example of how to collect information for all primary sources in a real case. Each of the cases refers to one different diagnostic type: 1. ADDH with conduct disorder. 2. Post-traumatic stress disorder with self-injurious behaviour. 3. Depression with associated problematic use of video-games and 4. Bulimia nervosa with co-morbid Internet problematic use. The workshop participants will be divided in four groups based on the four cases above-mentioned. Each group will be guided by a "supervisor" and each participant will be assigned a specific role: patient, parents, teachers and therapist.

Results: This role playing will help underline the difficulties we can meet when researching the child and adolescent clinical practice as well as the coordination of Mental Health-Education and the possible impact of prevention in psycho-educational fields. The workshop closes with a discussion of the different experiences and highlights.

Conclusion: It is necessary to learn how to carry a clinical history in child and adolescent psychiatry efficiently and to acquire practical competence in coordination with all the professionals implied in children and adolescents primary care.

Keywords: Child and adolescent psychiatric training, Clinical anamnesis questionnaire, School coordination protocol.

References

1. Le Couteur A, Gardner F (2008) Use of structured interviews and observational methods in clinical settings. In Rutter M et al. (eds). *Rutter's Child and Adolescent Psychiatry*, 5th Edition. Oxford, Blackwell, pp 271–288.
2. Hamilton J, Cuhadoroglu-cetin F (2013) Evidence-based practice in child and adolescent mental health. *IACAPAP Textbook of Child and Adolescent Mental Health*, Chapter 6.

PT-110 Social support, parenting styles and Latino children behavioral functioning

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Objective: The present study examined social support as a predictor of early childhood functioning, mediated by parenting practices, in Mexican- and Dominican-origin families of young children.

Methods: Participants were 4–5 year old children (N = 674) and their families and teachers. Mothers who self-identified as MA or DA and had a child in pre-kindergarten (pre-k) or kindergarten in one of 24 public elementary schools in NYC were eligible to participate. Mothers reported on children's internalizing, externalizing and adaptive behavior in the home (anxiety, depression and somatization) and also completed a measure of perceived social support, involvement and parenting style (i.e., positive parenting and harshness discipline parenting). Teachers reported on children's internalizing, externalizing and adaptive behavior in the school.

Results: To test the conceptual model, we conducted structural equation modeling (SEM) using MPLUS 6. All the SEM analysis controlled for family poverty, marital and educational status. For MAs, we found partial support of the mediational mechanism. Specifically, we found that relative support was associated with mother's practice of supportive parenting, which was then associated with high child adaptive skills (parent report). Although we found that harsh parenting was related to all domains of child outcomes in expected direction, social support was not related to MA mothers' use of harsh parenting. For DAs, four significant mediational paths were found. We found that relative support was associated with lower use of harsh parenting, and was then associated with lower problem behaviors and higher child adaptive behaviors (parent report). In the expected direction, support from school parents was also associated with higher parent involvement in classroom and higher use of supportive parenting, which was then related to higher teacher and parent reported adaptive behaviors.

Conclusions: Social support seems to be a protective factor of children functioning at home and school and, especially for DA, this protective effect seems to be mediated by parenting styles. Studying the risk and protective factors appears to be important since it may have an impact on how these children deal with the negative effects of socioeconomic disadvantage experienced by many Latino families in the US.

PT-111 Strengthening the parent-team alliance in child semi-residential psychiatry

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Background: The parent-team alliance is regarded as a crucial factor related to child residential treatment success. In a child semi-residential setting youth switch daily between treatment and home, which makes an investment of team members in a strong therapeutic alliance with parents a necessity. However, while there has been attention for youth and adult alliance building in psychotherapy, insufficient empirical evidence exists to guide clinicians in the process of therapeutic alliance formation with parents.

Objective: This study describes the effect of strengthening the parent-team alliance on the development and strength of therapeutic alliance over time. Hypothesized was that the alliance with parents of children in semi-residential psychiatry can be strengthened by a structured investment of team members.

Method: Participants were primary caregivers and case managers of 46 children between 6 and 12 years who received semi-residential psychiatric treatment. An AB design was applied, in which the first 22 children were assigned to the comparison group receiving treatment as usual and the next 24 children to the experimental group, where staff members used alliance building strategies. Alliance

questionnaires were filled in with 3 month intervals during both treatment conditions. Alliance building strategies were promoting partnership with parents, a mutual investment in treatment design and explicitly evaluating the strength of the parent-team alliance.

Results: Multilevel analyses (MLWIN) showed that, based on case managers' ($p < 0.00$) and care givers' reports ($p < 0.01$); the alliance building strategies had a statistically significant effect on the overall strength of the therapeutic alliance between team members and parents. While for case managers' reports there was a significant different pattern of the development of alliance over time between the two treatment conditions, this was not the case for caregivers' reports.

Conclusion: Due to the high costs and impact of (semi) residential psychiatric treatment in youth mental health care, there is a need for refinement of effective strategies. In this presentation one such effective strategy is explored and underscored, namely the benefits of a structured investment in the parent-team therapeutic alliance to substantially strengthen this alliance.

PT-112

Systematic review of mental health outcomes in young people following sexual assault

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Aims: Sexual assault peaks in mid-to late adolescence but its sequelae among this age group are not well understood. This systematic review aimed to describe mental health outcomes following sexual assault in young people.

Methods: Two reviewers searched Medline, Embase, CINAHL, OpenGrey and PsycINFO databases independently, screening publications from 1990 to 30th October 2013. Inclusion criteria: longitudinal studies, systematic reviews and meta-analyses in English with ≥ 50 % participants aged 10–24 years; baseline mental health assessment conducted prior to or < 8 weeks post-assault with follow-up ≥ 3 months later, and within 3 years of index assault. Study selection, data extraction and quality assessment were performed independently, with any differences resolved by a third person. Quality assessment used the Newcastle-Ottawa Scale.

Results: 3758 titles and abstracts were screened after excluding duplicates, with 494 papers examined in full. Five cohort studies met inclusion criteria (sample size 64–294; mean age 13–26 years; duration of follow-up 3–12 months post-assault).

Three studies examined rates of Post-Traumatic Stress Disorder (PTSD), reporting rates of 88–94 % within a month of assault, 47–71 % by 3 months and 10.5–65 % by 12 months post-assault. Only one study measured rates of Depressive Disorder, reporting rates of 35 % 6 months post-assault. A study assessing anxiety disorders 6 months post-assault found that 11 % had Generalized Anxiety, 16 %, Panic Disorder, 44 %, Social Phobia, 41 %, Specific Phobia and 56 %, Agoraphobia.

Longitudinal studies evaluating post-traumatic ($n = 3$), depressive ($n = 2$) or anxiety symptom scores ($n = 1$) all reported reduced symptoms over 6–12 months post-assault.

Limitations: Small sample sizes, and heterogeneity of study populations, measures used and follow-up schedules.

Conclusion: Psychopathology is common following sexual assault in young people. Most studies reviewed observed reduced rates of mental health disorders and reduced symptom scores over time but there is a paucity of longitudinal research in this area. Large scale, good quality studies are needed to characterise the nature and course

of mental health difficulties experienced by adolescent sexual assault victims over time, in order to allow for better targeting of resources for these individuals.

PT-113

Tedis: a collaborative information system to collect pertinent data from psychiatric, neurologic, and genetic investigations in patients with pervasive developmental disorder

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Tedis: a collaborative information system to collect pertinent data from psychiatric, neurologic, and genetic investigations in patients with pervasive developmental disorder

Robel L, Ben Saïd M, Damville E, Rousselot-Pailley B, Golse B, Jais JP, and Landais P

The creation in France of expert centers (CRA) to establish PDDs diagnoses based on documented pluri-disciplinary experts' assessments has improved PDDs' patients identification. Professionals collect important data concerning history, cognitive and developmental functioning of the patients, as well as the results of medical investigations.

We have developed an innovative information system devoted to PDDs called TEDIS, designed to easily integrate longitudinal PDD expert assessments in multiple centers.

Methodology: TEDIS, is a modular, multi-centric information system including a production database. Patient information's are organized in two parts: patient anteriority covering medical history, family's medical and social context, psychomotor development and care prescription prior to the assessment in an expert medical center. The second part concerns the phenotypic presentation, including the neuropsychological assessments, diagnosis, therapeutic recommendations and investigations in neurology and genetics. Longitudinal assessments follow-up are collected in TEDIS as well.

Results: We present descriptive data concerning 124 PDD patients in TEDIS: clinical characteristics, familial characteristics, birth and early development, age of early signs and diagnosis, therapeutic interventions, school, and results of the neurological and genetic investigations.

Conclusion: TEDIS is a promising software tool to federate pluri-disciplinary experts around PDD patients' topics. It supports decision making and collaborative research between clinicians and researchers from different medical specialties and institutions, which may contribute to a better knowledge of the etiology and epidemiology of pervasive developmental disorders in France.

PT-114

The Amsterdam sexual abuse case (ASAC)-study in day care centers: longitudinal effects of sexual abuse on infants and very young children and their parents, and the consequences of the persistence of abusive images on the internet

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Amc-de Bascule; Amc; Amc-ggd; Ggz-ingeest/vumc-vu; Ggd

Background: Little research has been done on the signs of child sexual abuse (CSA) in infants and very young children, or on the consequences that such abuse—including the persistence of the abusive pornographic images on the internet—might have for the children and their parents. The effects of CSA can be severe, and a variety of risk- and protective factors, may influence those effects. CSA may affect the psychosocial-, emotional-, cognitive-, and physical development of children, their relationships with their parent(s), and the relations between parents. In the so called ‘the Amsterdam sexual abuse case’ (ASAC), infants and very young children were victimized by a day-care employee and most of the victims were boys. Research involving the children and their parents would enable recognition of the signs of CSA in very young children and understanding the consequences the abuse might have on the long term.

Methods/design: The proposed research project consists of three components:

(I) An initial assessment to identify physical- or psychological signs of CSA in infants and very young children who are thought to have been sexually abused ($n = 130$);

(II) A cross-sequential longitudinal study of children who have experienced sexual abuse, or for whom there are strong suspicions;

(III) A qualitative study in which interviews are conducted with parents ($n = 25$) and with therapists treating children from the ASAC. Parents will be interviewed on the perceived condition of their child and family situation, their experiences with the service responses to the abuse, the effects of legal proceedings and media attention, and the impact of knowing that pornographic material has been disseminated on the internet. Therapists will be interviewed on their clinical experiences in treating children and parents.

The assessments will extend over a period of several years. The outcome measures will be symptoms of posttraumatic stress disorder (PTSD), dissociative symptoms, age-inappropriate sexual behaviors and knowledge, behavioral problems, attachment disturbances, the quality of parent-child interaction, parental PTSD, parental partner relation, and biological outcomes (BMI and DNA).

Discussion: The ASAC-project would facilitate early detection of symptoms and prompt therapeutic intervention when CSA is suspected in very young children.

PT-115

The dark side of organic symptoms

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Introduction: Adolescence keeps some similarity with the the first phase of separation of the child from his mother that appear in the first years of life.

Objective: Apply a psychodynamic approach in the treatment of an adolescent with organic symptoms.

Methodology: For the study of this case, we had reviewed literature about the psychodynamic mechanisms involved in the process of adolescence.

Results: We expose the case of a 16 year of woman with the diagnosis of generalized anxiety disorder. She was doing her follow up at the childhood and adolescent unit because she presented, with a lot of frequency, panic attacks with hysteriform characteristics.

Family dynamics: dominant and castrating mother; submissive, tolerant father with multiple physical pathology.

She presented torpid evolution during the follow up years with fluctuations in her basal level of anxiety in relation with the illness of her parents. She also presented poor academic results and difficulty in social relationships.

She started to present neurological symptoms, specially at the sensory-motor level predominantly at the right side of the body. For this symptoms she had to stay as an inpatient at the neurology unit for three times. Finally her diagnosis was conversion disorder. She had to use for 2 months a wheelchair.

We made the follow up of this case because we introduced psychopharmacological treatment. Because of the torpid evolution, we saw that the girl needed some kind of psychotherapeutical treatment, specially a psychodynamic and systemic approach, taking into account the importance of adequate intervention on family dynamics.

We emphasize the importance of a proper and early treatment of anxiety disorders in children with a multidisciplinary approach taking into account the great importance of psychotherapy.

PT-116

The devastating effects of shkothane

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Izikhothane is a rapidly growing clandestine movement spreading rapidly and gaining popularity, amongst impoverished Black South African youth.

It is a culture whereby youth join a “gang”, which meets to “battle” and challenge one another. They compete with each other’s price and label of clothing, accessories and alcohol. In order to win one must burn or destroy one’s own most expensive items of clothing/shoes. A crowd, comprising members of the community, often including young children, gather around the competitors who dance and goad the other gang members encircled around them, whilst the crowd encourages them to be destructive. The competitor receiving the loudest cheers and reactions from the audience, is deemed to be the winner. This movement is typically found in impoverished townships, and the funding for these expensive items is usually more often than not from their parents/grandparents, who often have to survive on meagre pensions in order to provide for all their dependents.

The down side of this seemingly ludicrous movement relates to youths demanding money from their parents/grandparents in order to purchase luxury items of clothing in order to impress their peers while partaking in Izikhothane rituals. Where their demands are not met, adolescents try to blackmail their caregivers by threatening to commit suicide if they cannot buy these clothes/liquor. In certain instances adolescents have actually carried out their threats with devastating effects on their families.

At present this phenomenon is being researched at the Free State Psychiatric Complex in Bloemfontein, South Africa. Results of the project will be shared at the conference.

PT-117

The effect of family environment on the antioxidant defense system in adolescents with family history of psychosis

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Oxidative stress is characterized by an imbalance between oxidant molecules and antioxidant defence. Several studies suggest that oxidative stress plays an important role in membrane pathology in the central nervous system (CNS) and, although they may not be the main contributory factor, free radicals may be involved in physiopathology of many diseases including schizophrenia. The primary antioxidant cellular defence includes superoxide dismutase (SOD), catalase (CAT) glutathione peroxidase (cGPx) and Glutathione (GSH) and all of these chemical species are altered in patients with schizophrenia. It has been shown that antioxidant capacity could have a genetic basis, which would be modified throughout life by environmental factors, suggesting the possible presence of an early dysfunction in the antioxidant defence system in genetically predisposed individuals.

The objectives of this study are to determine antioxidant defence at the peripheral level in healthy unaffected second-degree relatives of patients with early onset psychosis (HC-FHP) and to compare it with that of healthy people without affected relatives. We also examine the association between oxidative stress and familiar environment using the Family Environment Scale (FES). The sample included 82 HC and 14 HC-FHP aged between 9 and 17 years. Total antioxidant status, lipid peroxidation, antioxidant enzyme activities and glutathione levels were determined in blood samples. The results show a significant decrease in the total antioxidant level in the HC-FHP group compared with the HC group (OR = 2.94; $p = 0.009$), but no between-group differences in the Global Assessment of Functioning (GAF) scale scores. For the FES, the HC-FHP group had significantly higher scores in the cohesion ($p = 0.007$) and intellectual-cultural dimensions ($p = 0.025$). After adjusting for these two FES dimensions, total antioxidant status remained significantly different between groups (OR = 10.86, $p = 0.009$). In conclusion, although causal relationships cannot be assumed, we can state that family environment is not playing a role in inducing oxidative stress in these healthy subjects. It could be hypothesized that families with affected relatives protect themselves from psychosis with positive environmental factors such as cohesion and intellectual-cultural activities.

PT-118 The effectiveness of behavioral parent training program (PT) for children with adhd and asd in Japan

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Objective: We performed PT which revised of UCLA (University of California, Los Angeles, USA) encounter to Japanese culture to parent of children with developmental disorder (Attention Deficit Hyperactive Disorder: ADHD, Autistic Spectrum Disorder: ASD) since 2000 and reviewed the efficacy.

Methods: The PT session was performed ten times every 2 weeks. One session was comprised of warming up, reporting homework, lecture with handout, role playing and feedback and assignment of the next homework. The contents were understanding child's behavior (by

Applied Behavior Analysis), 3 types of children's behavior (You like/don't like/intolerable), special time and praise, giving effective commands, ignore and praise, limit setting, token system and cooperation with school. We evaluated 104 participants in this PT from 2000 to 2013 about a change of their parental self-efficacy of bringing up. HSQ (Home Situations Questionnaire), children's behavior problems (ADHD-RS at home and school) and children's emotional scale (Depression Self-rating for Children) before/after PT and 1 year later. **Results:** The school year of the target children was a seventh grader from a first grader, the sex was 94 male and 10 female, and the diagnosis was ADHD 75, ASD 24, ADHD + ASD 3 and the others 2 by DSM-IV. Parental self-efficacy of participants was improved significantly and maintained 1 year later. The hyperkinesis and the inattention of children were improved significantly at home, but the inattention was not improved at school. Children's mood was not improved, but some items about self-esteem as "Even if hard on me, I can say "Stop it" by itself" and "Whatever I may always do, I am pleasant" were improved. On the presentation day, we report more detailed results and discuss them.

As ethical considerations, we explained by a document to a co-operator and obtained the study cooperation's consent.

Keywords: Parent Training, Efficacy.

PT-119 The first results of the new Dutch youth law

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The First Results of the New Dutch Youth Law

From January 2015 on, the Dutch youth care system is decentralised and transformed. As a consequence, the municipalities are responsible for all youth care services, including specialised services such as mental health care. In short, the Dutch youth care system is aimed at more efficient, coherent and cost-effectiveness. This change in the youth care system and proposed reduction of costs provokes a paradigm shift towards:

1. Prevention, and empowerment of children, parents and their social environment.
2. Demedicalization', i.e. strengthening the pedagogical climate in everyday life so that more behavioral problems are reduced without medical interference.
3. Demand-driven and more tailor-made care (i.e. in collaboration with the clients), that is more closely related to daily life and more cost-effective.
4. Coherent care for families, with preferably one care taker involved per family.
5. Less regulatory burden for health care professionals.

The aims are high. Do the municipalities live up to the expectations? What are the latest insights from the Dutch municipalities? Where do they collaborate, and where are actual differences in perspective? What are the successes and mistakes that we can learn from? By June 2015 the first results will be available and presented.

PT-120 The impact of austerity on the mental health of children and adolescents

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The Impact of Austerity on the Mental Health of Children and Adolescents.

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Introduction: Child & adolescent mental health problems in children are associated with low parental income and unemployment. There has been longstanding controversy regarding the nature of this association and causal processes. The period of austerity beginning with the global financial crisis in 2008, resulting in the deepest recession for decades, has added a new dimension, occurring during a period of growing commitment to the promotion of child and adolescent welfare. This has resulted in a growing literature on the effects of austerity on child and adult mental health. We set out to review the literature investigating whether austerity is associated with worsening child and adolescent mental health.

Method: A systematic literature review is presented in this poster. Articles were identified in Pubmed, Psych lit, Embase and Cinhal using the appropriate combination of the search terms austerity, income reduction, recession AND impact on mental health AND adolescents, children. Following this, inclusion and exclusion criteria were used to ensure that all papers were relevant to our search. References of the identified papers were also cross-checked and included if they were relevant. The papers were appraised using the STROBE checklist and the Newcastle-Ottawa Quality assessment scale.

Results: 9 articles were identified in the preliminary findings. Most papers have identified associations between austerity and children and/or adolescent mental health problems. There is however heterogeneity in the methods used and in the type psychopathology. In this poster we will group the findings to clarify whether the impact is direct, or mediated by adult attitude to the consequences of austerity, and to see if there are risk and resilience factors that may be of clinical importance.

Conclusion: Studies suggest a negative effect of austerity on child and adolescent mental health but study weakness indicate further robust research is needed.

Keywords: Adolescents, Austerity, Children, Mental health, Ecession.

PT-121

The impact of early prenatal stimulation on child psychophysiological development

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Prenatal auditory stimulation have positive and irreversible affect to early stages of human verbal, cognitive and emotional maturity. The child psychophysiological development is in a great manner under the influence of mother' emotions during the pregnancy and may be influenced by different types of stimulation. Research aim was to estimate the early psychophysiological development of children who were intensely stimulated in the prenatal period.

Research methodology: The longitudinal study included four male children tested at the age of 1 year, then 2–2.5 year and at the age of 4 years. These children were intensely stimulated by their mothers during the prenatal period. The examination was undertaken in Institute for experimental phonetics and speech pathology (IEPSP) in Belgrade. Methodological procedures included the elaboration of anamnestic data and the application of The Scale for estimation of psychophysiological abilities of children from 0–7 years (IEPSP Battery tests).

The paper discusses the achievements of the children in relation to stimulation applied in prenatal period. On the basis of the obtained data it can be concluded that early stimulation (which includes stimulation of prenatal communication) may have the positive effects on children's early speech and language, motor and emotional development.

Keywords: prenatal stimulation, early child development

PT-122

The importance of maternal weight for the occurrence of ADHD and autism in children

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Attention deficit hyperactivity disorder (ADHD) and autism spectrum disorders (autism) are neuropsychiatric disorders, which appears in childhood with serious consequences for the affected children and their parents. The causes of ADHD and autism are not clear, but a significant genetic component are believed to be involved probably in combination with environmental influences. Among the environmental impacts that have been discussed is a possible association between maternal weight during pregnancy and the development of ADHD and autism in children. There are a number of studies showing different results, and causal relationships related to endocrine disruptions or immunological effects are hypothesized.

The project aims to investigate the hypothesis that there is an association between the mother's BMI before pregnancy or weight gain during pregnancy and the occurrence of ADHD or autism in children.

Denmark host one of the largest birth cohorts in the world, The Danish National Birth Cohort (DNBC). Between 1996 and 2002 Danish-speaking pregnant women were invited to take part in the DNBC by their general practitioners at the first antenatal visit and a total of 101,042 women consented to participate. The data about the mothers weight gain used in this project were collected via telephone interviews during weeks 12 and 30 of pregnancy, and when the child was 6 months old. The children in the cohort are now between 11 and 16 years, and via the Danish registers it is possible to identify those children, who have been diagnosed with ADHD or autism.

An investigation of correlations between the mother's weight during pregnancy and later ADHD or autism in the child will be a unique study because of the size and quality of the data collected. It could also add important news to the international search for causes of ADHD and autism.

The project is ongoing and results are expected to be ready in May 2015.

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Keywords: ADHD, Autism, Pregnancy, Cohort study.

PT-123**The influence of lateralization and age on the semantic development at children**

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Center For Education “buzganovic”

Speech is the highest form of human behavior and a complex functional system which is in the structure of other functional systems of the organism, in constant mutual and integral connection with bio—psychosocial systems. Early school age is the time of rapid spread of language competence within grammatical level of language structure. Semantic development implies a complex process of joining language content plan to the language expression.

Consideration of the literature dealing with the problems of speech and language development in children, with the aim of collecting as much data on the speech—language development of preschool children and young school, we found that most of the authors has a similar presentation regarding articulation skills, grammatical, semantic, morphological and lexical skills of junior school children and preschoolers.

The conducted research has the objective to determine if there is the influence of lateralization and age on the level of semantic development with pre-school and young schoolchildren. And also, if there is the interaction between these two factors (lateralization and age) during the semantic development. The research was conducted in Belgrade, Serbia in three pre-school institutions and in one school. The sample was formed according to the age and gender: 100 six and a half year old children and 100 seven year old children, of which 100 boys and 100 girls. The following instruments were used in the research: Semantic test (S. Vladisavljevic) and Lateralization test. Based on the received information regarding semantic abilities, age and lateralization we can conclude that gender and age, and their interaction have an effect on the total score in the Semantic test. The practical significance lies in the eventual possibilities of this research contribute to improving the quality of work with left-handed and the right-handed preschool children and children younger school age in the development of speech and semantics in general.

Research of the impact of lateralization and age at development of semantic abilities might in some way encourage further research on the still under- explored field of speech and language pathology.

Keywords: Lateralization, Semantic abilities, Age of the children.

PT-124**The outcome of primary prevention program for children and adolescents at risk for developing psychopathology**

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Introduction: In 2007, the Youth Climatic Health Resort Rakitna introduced an indicatory primary prevention program for children and adolescents at risk for developing emotional or eating disorders (“School for Healthy Growth”). The children were referred to the program by crisis centers, pediatricians, social workers and school counselors. The aim of the present study was to determine the characteristics of the program’s participants and to assess its effectiveness. **Subjects and methods:** Evaluation included 400 participants (42 % girls), aged 6–20 years (boys 11.5 ± 2.5 , girls 12.3 ± 2.7) who were administered Youth Self Report (YSR), Child Behavior Checklist

(CBCL) and Teacher Report Form (TRF) questionnaires before admission (first assessment), 14 days (second), 6 months (third) and 18 months (fourth) after discharge from 2010–2012.

Results: At the time of admission the averages of all Achenbach Syndrome Scales, Internalizing and Externalizing Scales were below the clinical threshold as reported on YSR and CBCL. As reported in TRF at the time of admission, the averages of all Syndrome Scales were below, the averages of Internalizing and Externalizing Scales were above the clinical threshold. The differences in the values between the first and the third assessment were as follows: there was a trend toward a decrease in the values of Syndrome Scales Thought Problems and Aggressive Behavior (not statistically significant, NS), Somatic Complaints ($p = 0.03$) and Rule Breaking Behavior ($p = 0.05$) on YSR; there was a trend toward a decrease in the values of all Syndrome Scales in CBCL apart from Withdrawn/Depressed and Attention Problems (NS); there was a trend toward a decrease in the values of all Syndrome Scales in TRF apart from Withdrawn/Depressed (NS); there was a trend toward a decrease in the values of Internalizing and Externalizing Scales in YSR, CBCL and TRF (NS).

Conclusions: The participants of the program seem to represent a sub-clinical population that may be at increased risk for development of psychopathology. The delivered intervention seems to be effective in the short-term reduction of symptoms and may prevent their deterioration.

Keywords: Prevention programs, Evaluation, Mental health risk.

PT-125**The relation of maternal internalizing problems during pregnancy and postpartum with children’s fussy eating. The generation r study**

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Background and objective: The aetiology of fussy eating is not well understood. We aimed to examine the association between maternal internalizing problems and child food fussiness.

Design: This study was embedded in the Generation R Study, a prospective birth cohort in the Netherlands.

Materials and methods: A total of 3550 mother-child dyads were included. Maternal symptoms of anxiety and depression were assessed with the Brief Symptoms Inventory during pregnancy and postpartum at 2 months and 3 years. Mothers filled out the food fussiness scale of the Child Eating Behaviour Questionnaire when children were 4 years old. Also, we used maternal and paternal reports on two items of the Child Behavior Checklist (CBCL) as a proxy for fussy eating at age 3 years. Regression analyses were performed, adjusting for potential confounders.

Results: Maternal anxiety symptoms during pregnancy and the early postpartum period were related to an increased food fussiness score in 4-year old children (e.g. in prenatal model: 0.47 points per 1-SD anxiety score, 95 % CI: 0.23; 0.75, reported by mothers). Likewise, maternal anxiety symptoms were also associated with paternal reports of child fussy eating at three years of age (e.g. in prenatal model OR = 1.17, 95 % CI: 1.09; 1.28). These findings were independent of maternal depressive symptoms and potential confounders including socio-demographics. In contrast, maternal depressive symptoms were not associated with food fussiness after accounting for maternal anxiety.

Conclusions: Findings suggest a specific relation between maternal psychopathology and child fussy eating with particularly maternal anxiety predicting eating difficulties in children. While reporter bias

seems unlikely given the similar results with father reports of fussy eating, underlying mechanisms may be an inherent biological predisposition to behavioural inhibition or an effect through child rearing behaviour.

Keywords: Children, Maternal anxiety, Maternal depression, Fussy eating behavior, Multiple informants.

PT-126

The research review in higher specialist child and adolescent psychiatry training

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Background: There is a rapidly changing and expanding knowledge and practice base in child and adolescent psychiatry (CAP). Trainees need to be prepared for lifelong learning, and have the skills to acquire and appraise new information. This is necessary to inform clinical practice, make informed contributions to service developments, and is a fundamental part of research activity. Since 2013 the UK national curriculum in CAP requires all higher trainees to be able to find and analyse research carried out by others and to assimilate this into a literature review, written to a publishable standard. This presentation describes the development of a course and the training structure.

Methods: The course involved a 2 h introductory session outlining the key steps required in carrying out a literature review. The course was evaluated by a questionnaire.

Results: The session was set in the training context for CAP in London and links to the need for skills acquisition in other areas such as library skills and obtaining a suitable supervisor. The session specifically focussed on: refining the research question, communication about the established principles of reviewing such as identification of papers, data extraction and quality assessment, structuring the review, synthesising the information and drawing conclusions. The evaluation involving >20 higher trainees indicated the session was highly regarded with trainees finding the session very useful, pitched at the appropriate level and to have improved trainee confidence in this area.

Discussion: Within the UK the new generation of CAP higher trainees should be able to use research review skills in their roles as clinicians, service providers, teachers and researchers. Further evaluation of the training sessions and ongoing research supervision is required. Given the mobility of CAP professionals it is important to consider similarities and differences in research training within other EU countries and beyond.

Keywords: Child and Adolescent Psychiatry Training; Research; Reviews.

Reference:

Royal College of Psychiatrists (2013) A Competency Based Curriculum for Specialist Training in Psychiatry. Royal College of Psychiatrists. Available at: <http://www.rcpsych.ac.uk/pdf/May%202013%20Specialist%20Curriculum%20for%20Child%20and%20Adolescent%20Psychiatry.pdf>

PT-127

The role of the psychiatric nurse in multidisciplinary assessment at the psychiatric hospital for children and adolescents, Zagreb, Croatia

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Psychiatric Hospital for Children and Adolescents, Zagreb, is the largest mental health facility for child and adolescent psychiatry in the Croatia. The hospital provides a continuum of services including outpatient, partial hospitalization, acute inpatient and resident care. Multidisciplinary team of psychiatrists, neuropsychiatrist, psychologists, speech therapists, occupational therapists, social workers and nurses provides assessment and treatment of children from many backgrounds and with a wide variety of conditions, including adjustment disorders, anxiety disorders, affective disorders, developmental delays, depression, learning disabilities, psychotic disorders, severe disruptive behavior, and suicide attempts.

In diagnostic process, the aim of is to reduce the number of assessments that a child undergoes, break down professional boundaries and improve information sharing. Multidisciplinary assessment is arranged on outpatient basis in 1 day and is conducted within the holistic and individualised approach. For most severe cases, inpatient assessment, observation and treatment are arranged.

Psychiatric nurse, as mental health specialist, plays a fundamental role and participates in the organization and management of the mental health care team in child and adolescent psychiatry. The nurse is an equal member in the team and is the link for communication and the main source for information. The nurse brings her/his own specialized knowledge and collaborates with other health care providers in assessing, planning, implementing and evaluating programs and other mental health activities. The nurse works on the base of the “special nurse-child” relationship and has the full responsibility of the child.

The psychiatric mental health nurse’s assessment is a systematic process of gathering a range of information relating to the young person for the purpose of determining mental health problems, functional status, needs, strengths and inform action planning. Methods used to obtain data include interviews, observations, physical examinations, review of records, collection of collateral information, and collaboration with colleagues to make sound clinical assessments. Data collection is guided by nurse’s knowledge of human behavior and the principles of the psychiatric interviewing process. The nurse also ensures that appropriate consents are obtained to protect patient confidentiality and support the patient’s rights in the process of data gathering. Finally, the psychiatric nurse synthesizes and documents available data, information, and knowledge relevant to the patient and situation.

The psychiatric mental health nurse uses effective communication and interviewing skills that facilitate development of a therapeutic alliance. Assessment is not a therapeutic intervention, but it is essential for effective planning, implementing and evaluation of care.

PT-128

The school-based healthy-habits education intervention decreased depressive symptoms of middle school students

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Background: Insufficient sunlight exposure, high junk food consumption, and sleep deprivation are known risk factors for decreased mental welling, including elevated depressive symptoms.

Objectives: This study examined the effects of a school-based healthy-habits promotion intervention on depressive symptoms in middle school students.

Methods: This intervention study with a pre-test-post-test design included 617 middle school students aged 13 to 15 in Seongnam, South Korea during year 2013. The 8-month educational intervention consists of 3 slogans; (1) Sunlight exposure >30 min (min) a day, (2) No junk food, and (3) Healthy sleep. The intervention consisted of a 3-h educational session in the classroom on healthy habits, in-school display of posters on healthy habits, and participation in a 30-min outdoor activity at lunch break and diary on daily activities, diet, and sleep time. The healthy habit messages were reinforced by teachers and students' council. The primary outcome was depressive symptoms by Center for Epidemiologic Studies Depression Scale (CES-D). Secondary outcomes included the number of days of sun exposure of >30 min/day and junk food consumption in a week. General linear mixed models were performed to estimate odds ratios (OR) and 95 % confidence interval (95 % CI) for the pre and post intervention comparison. To reduce bias in the point estimates, we evaluated potential confounders including child sex, grade level, assigned classroom, sleep hours/24 h, general health status, physical activity, time spend walking per day, weight, height, and stress.

Results: The study sample consisted of slightly more boys (51 %) than girls and about equal percentage distribution of 7th, 8th, and 9th graders. After controlling for confounders, the intervention was associated with significant increase in the number of days of sunlight exposure of >30 min/day (OR: 3.65, 95 % CI: 2.90, 4.59) compared to before intervention. Conversely, the intervention was associated with reduced odds of depressive symptoms by 32 % (OR: 0.68, 95 % CI: 0.52, 0.88) compared to before intervention after adjustment for confounders. Of noteworthy, we also observed that every one additional hour of sleep decreases the odds of depressive symptoms by 14 % (OR: 0.86, 95 % CI: 0.78–0.95) in the multivariable analysis. The intervention was not significantly associated with any changes in the number of days of junk food consumption.

Conclusions: These results suggest that school-based educational and behavioural intervention focused on healthy habits may decrease depressive symptoms in adolescents. Nevertheless, our study findings need to be further validated with more rigorous design.

PT-129

The scientific model and the DSM (or why it's so difficult to validate a psychotherapy model)

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The scientific model and The DSM (or why it's so difficult to validate a psychotherapy model)

(These are the preliminary results of an ongoing investigation).

One of our bigger deals as psychiatrists is how to make a scientific model.

The phenomenology is as old as the medicine itself. The first's physicians wrote long medicine's treaties full of symptom's descriptions that have progressively disappeared from other specialties, but not in our field.

In a reductionist way it could be said that the DSM is just another phenomenological treaty.

However psychiatric investigation has gone further and now it is as relevant as neurological one. And now we may talk about a wide group of pathogenic factors in every mental illness.

That point of view is closer to the biopsychosocial/diathesis-stress model which has become the dominant paradigm in medicine.

Nevertheless when we try to validate our treatments we use the phenomenological DSM model, so we have little scientific feedback, because our nosological categories are just symptom's aggregations.

We started that way trying to validate a psychotherapy model for eating disorders and soon we found the difficulties associated.

We had to put together different patients in a same big group (AN, BN), but we don't treat them in the same way so we didn't have any statistic outcome.

But when we look over psychiatry we found that neurologists or oncologists didn't act in that way.

Per example, they didn't take a group of patients with fever and cough, diagnosed all of them of pneumonia and treated with antibiotics. They make a finest diagnosis which let them talk about bacterial and virical pneumonias and use the antibiotic treatment just in the first group. So, they have a scientific outcome and they can prove antibiotics are useful in bacterians pneumonias. If not doing so, the more they could argue would be that cough medicine is effective in pneumonia.

This abstract will briefly explain how we are trying to look for a different way which solves our problem: the absence of a gold standard, without coming back just to the phenomenological model, as a first step to validate the individual psychotherapy treatment which is psychotherapy's main strength.

We discuss how the answer could be in make a wide diagnosis which take into account the known pathogenic factors, what, in doing so let see different patterns for a same DSM diagnosis category.

PT-130

The use of routine outcome monitoring in child semi-residential psychiatry

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Background: Implementing Routine Outcome Monitoring (ROM), which is assessing clients' progress during treatment, carries potential advantages on multiple levels. Not only at the individual level is ROM an effective clinical tool; it is also beneficial for scientific research and benchmarking. Unfortunately in the youth field, the engagement of clinicians, and even more of parents, in ROM proved to be difficult. This may particularly be so in complex settings where multiple participants are involved, such as youth (semi) residential psychiatry. Well thought out approaches to ROM implementation need to be developed.

Objective: The implementation of a ROM system on five treatment units of a child semi-residential psychiatric centre. Parents and clinicians responsiveness during ROM assessments was examined. Hypothesized was, based on outpatient ROM research, fewer completion of ROM questionnaires by parents than clinicians. Therefore, the role of demographics, children's psychiatric problems, parental alliance and stress was explored in relation to parents' responsiveness to ROM.

Method: Parents and clinicians of a sample of 46 children admitted to semi-residential psychiatric treatment participated in this study. Implementation of ROM occurred with strong engagement of administration, a web-based computer programme and an active helpdesk. In ROM, parents and clinicians completed a battery of questionnaires with 3 month intervals, assessing symptom improvement, stress reduction of parents and child and parental alliances with team members.

Results: The mean response percentage of both parents during ROM assessment was 77 % compared to 91 % of clinicians. Logistic regression analyses revealed three initial treatment factors significantly ($p \leq 0.05$) predicting a low response or drop-out of parents during ROM: being a single parent ($p = 0.01$), mothers' stress related to physical health ($p = 0.04$), and having a weaker therapeutic alliance regarding goal setting ($p = 0.02$).

Conclusions: The findings in this study demonstrate the feasibility of using ROM in complex settings, such as youth semi-residential psychiatry. Clinicians are encouraged to motivate parents to mutually invest in ROM, and to take into account some factors indicating a possible low response of parents. ROM could become a collaborative and meaningful process in partnership between youth, parents and clinicians in order to improve youth's treatment. Furthermore, ROM as integral part of residential treatment provides large longitudinal datasets to create more insight in its effectiveness.

PT-131 Trajectories of internalizing are shaped by early conduct problems and vocabulary: a multi-observer approach

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Background: The importance of understanding the development of internalizing symptoms is highlighted by the association between these symptoms and later anxiety and depression. Although the rise of internalizing disorders has been well documented during adolescence, considerably less research has explored the factors associated with variations in trajectories of internalizing symptoms during the transition to adolescence. The goal of the current study was to understand how conduct problems and vocabulary scores shaped trajectories of internalizing symptoms during the transition to adolescence.

Method: Participants (ages 7–9) were drawn from an ongoing longitudinal study of French-Canadian children ($N = 687$, 50 % girls). Approximately half of the children were selected based on being referred by their school for behavioral services. The other half of the sample was matched to these children according to gender, age and family disadvantage. Parent and teacher rated internalizing was assessed in the first year and during three subsequent years. Parent and teacher assessments of conduct problems, children's vocabulary scores along with appropriate control variables were also assessed during the first testing period.

Results: Latent growth curve models revealed that on average, both mother and teacher rated internalizing decreased for both boys and girls during the transition to adolescence. For mother-rated trajectories of internalizing, mother-rated conduct problems were associated with higher initial levels of conduct problems for girls and boys, but were associated with steeper decreases in internalizing problems over time among boys. Higher vocabulary scores were associated with decreasing internalizing scores among boys over time, while for girls, higher vocabulary scores were associated with consistently lower levels of internalizing problems. When teacher-rated internalizing was the outcome, both mother and teacher rated conduct problems were associated with stably higher levels of internalizing among boys. Among girls, only teacher-rated conduct problems were associated with both higher initial levels of internalizing, but also with greater decreases in internalizing across time.

Conclusion: Although internalizing symptoms generally declined during the transition to adolescence, both vocabulary and conduct problems were associated with variation in these trajectories. Furthermore, the divergent findings from across mother and teacher

ratings suggest the importance of understanding how different contexts shape internalizing problems.

PT-132 Usefulness of animal type robot in the treatment in child and adolescent psychiatric ward

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Background: Animal-assisted therapy has been suggested as a treatment practice for mental disorder or developmental disorder in child and adolescent area. On the other hand, animal type robot is expected to be able to provide similar therapy for patients in a variety of clinical settings. Unlike animal-assisted therapy, it does not cause any allergies, infections, bites and scratches and can be introduced at lower cost. To date, there are some studies of its effectiveness for elderly people or dementia patients. However, the effectiveness of it in the treatment of child and adolescent patients remains unclear.

Objective and method: The purpose of the present study was to assess the effectiveness of use of animal type robot Paro in the child and adolescent psychiatric ward. Paro is a baby harp seal type therapeutic robot that was developed by Japan's National Institute of Advanced Industrial Science and Technology. We put it near the door of the nurse station and told the inpatients to play with it freely in the hall of the ward after getting permission from staffs. The interaction between patients and Paro was observed.

Results: Some patients treated it like real animal. For example, it was thought to be useful for 10-year-old girl with autism spectrum disorder (ASD) to develop good communication. And it was also considered to be useful for 16-year-old boy with ASD and moderate mental retardation in reduction of impulsive behaviors or anxiety. However, some patients with high functioning ASD did not like it because of some features like big eyes. Moreover, some patients who have attachment problem often attacked it.

Conclusion: As playing with Paro made some patients have good communication or feel relaxed, it is suggested that animal type robot would be useful for some child and adolescent patients. However, it is required to clarify what kind of patients would gain profit from the approach and how the approach would work in the treatment before introducing animal type robot-assisted therapy in earnest in child and adolescent psychiatry area.

PT-133 Validation of the french version of the parental reflective functioning questionnaire (PRFQ)

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The aim of this study is to validate a French-language version of the Parental Reflective Functioning Questionnaire (PRFQ). This 18-item self-report questionnaire is designed to assess the caregiver's capacity to recognize and think about their child's and own intentional mental states (e.g. thoughts, feelings, intentions) during the early parent-child relationship (i.e. reflective functioning, RF).

The original English version of the questionnaire demonstrated a three-factor model of the PRFQ: (1) certainty in mental states, (2)

interest and curiosity in mental states, (3) pre-mentalizing. However, the PRFQ is still not available for francophone samples.

175 mothers ($M = 33.13$ years, $SD = 5.44$) with children aged 0 to 3-year-old ($M = 20.32$ months, $SD = 12.88$) participated in the study, all completed an online version the PRFQ. A confirmatory factorial analysis (CFA) was used to test the three-factor model of Luyten.

The Luyten's theoretical model showed good fit to data ($\chi^2 = 158$, $p = 0.05$, $\chi^2/df = 1.20$, $RMSEA = 0.03$, $SRMS = 0.06$). Cronbach's alpha further indicated satisfactory internal consistency for certainty in mental states ($\alpha = 0.83$) and interest curiosity ($\alpha = 0.72$) subscales while a slightly decreased value for the prementalizing score ($\alpha = 0.48$) was observed.

The current study provides the first self-report for a reliable assessment of parental RF in francophone individuals. This easy-to-use scale is a promising tool for clinical and empirical purposes. Indeed, current studies the relevance of parental RF in psychopathology research, and underline its potential role as protective factor. In the future, complementary validity analysis and a deeper investigation of pre-mentalizing reliability are nevertheless needed.

PT-134

Validation of the Spanish hoarding questionnaire for adolescents (CUAC-A)

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Uab; Ub

When hoarding was created as a new disorder in the DSM-5 we already knew that this pathological collecting with inability to discard large quantities of seemingly useless objects emerged very early in life and could cause considerable distress and impairment for individuals and their family members. We observed that the impact of pathological hoarding was particularly interfering during adolescent years. Nevertheless, poor attention has been paid to adolescent hoarding until recently and instruments for assessing these behaviors have been missing. The only screening we found was a parent-rating instrument, the Children's Saving Inventory (created by Storch et al. 2010). Based on the latter instrument and on the self-report SI-R (Frost et al. 2004) for adults, we designed a new instrument, the CUAC-A, specific for assessing hoarding behaviors among adolescents through their own self-report. Its development has been published in 2012 in the *Revista de psiquiatria infanto-juvenil* (Domènech et al. 2012).

We present here the preliminary psychometric evaluation of the CUAC-A. The initial items were discussed by experts and applied to a pilot sample of 57 school-adolescents to assess content validity. A version of 35 items was administered to a 117 school-adolescents from the community. An item deputation based on an Exploratory Factor Analysis (EFA) was carried out to guarantee a simple factor structure. A process based on an iterative item selection was applied to discard the items that did not fit consistently into any of the factors. The result of this process was a structure of 18 items with a solution of three related factors, which accounted for 58 % of the variance. One factor included 8 items corresponding to symptoms of excessive clutter and difficulty discarding possessions (EC_DDP); a second factor with 5 items was related to the dimension of compulsive acquisition (CA); and a third factor with 5 symptoms was related to distress and interference (DI).

The version of CUAC-A with 18 items was answered by a sample of 916 adolescents from the general population (mean age = 13.89,

$sd = 0.745$, 52.6 % men). To validate the factor structure, the sample was randomly divided into two groups. An EFA was applied to the first subsample data (229 cases—25 %) and a Confirmatory Factor Analysis (CFA) was applied to the second subsample data (687 cases—75 %). The 3-factor structure was replicated with the EFA (the explained variance was 56.6 %) and confirmed with the CFA ($\chi^2 = 361.28$, $df = 132$; $CFI = 0.939$; $TLI = 0.929$; $RMSEA = 0.044$). The Cronbach's alpha were 0.844 (EC_DDP), 0.781 (CA), 0.838 (DI) and 0.886 (total).

A 3-month test-retest reliability ($n = 151$) confirmed the validity of the CUAC-A scores (CA = 0.686, EC_DDP = 0.638, DI = 0.311, total = 0.685). We also studied the relationships with other measures of closely related psychopathology. The factors that make hoarding significant are the distress and impairment associated with the symptoms.

All these results show that CUAC-A is a valid and consistent instrument to evaluate hoarding in adolescents.

PT-135

Vortioxetine paediatric pk study: design, doses and demographics

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Introduction: Vortioxetine is a novel antidepressant approved in EU and US for the treatment of depression in adults.

This first international paediatric pharmacokinetic (PK) study is the initial step of a large programme designed to evaluate the efficacy and safety of vortioxetine in paediatric population.

Background: Many antidepressants are approved for adults with depression, but not in paediatric population as only fluoxetine is approved for Major Depressive Disorder in EU for children and adolescents.

Mood disorders in children and adolescents are among the most debilitating illnesses, depression being among the 5 disorders with the highest disease burden. In accordance with available EU paediatric guidelines (Germany), multimodal treatment approaches are recommended including pharmacotherapy. However, there is a striking discrepancy between available evidence and the medical need in this population.

There are numerous challenges in the paediatric development of antidepressants, with many negative or failed trials. Several factors contributed to this failure, including inappropriate dosing regimens. Age-related sensitivity to drugs is attributable in part to differences in metabolic activity; children and adolescents have a faster elimination of drugs and plasma clearance decreases with increasing age. Therefore, identifying evidence-based dosing strategies remains a key initial step in drug development for paediatric use.

Vortioxetine is a novel antidepressant with a multimodal mechanism of action. In vitro, vortioxetine is a 5-HT₃, 5-HT₇, and 5-HT_{1D} receptor antagonist, a 5-HT_{1B} receptor partial agonist, a 5-HT_{1A} receptor agonist, and an inhibitor of the 5-HT transporter.

Methodology: In order to respond to regulatory requests and scientific questions, this first international paediatric PK study was designed to determine if the dose range of vortioxetine approved for adult patients can be used in paediatric efficacy and safety studies. This open-label international study performed in the US and EU (Germany), started in 2012—before regulatory approval of vortioxetine.

Design and demographics: Description of the international paediatric PK study assessing the entire adult dose range: population, design and methodology.

At baseline, 24 children (7–11 years) and 24 adolescents (12–17 years) were enrolled in 8 sequential dose cohorts.

Conclusions: Identifying evidence-based dosing strategies is a key initial step in paediatric clinical studies. International paediatric PK studies are feasible, and are associated with challenges in both design and implementation. This successful trial confirms their feasibility and opens the possibility of similar trials in the future.

PT-136

What do young people say about a program aimed to eraise mental health stigma

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Background: Stigmatization associated with mental illness constitutes a significant impediment, which affects its evolution. Programmes based on direct contact have proved to be more efficient in eliminating this stigma, than education and protest campaigns. Young people are a priority target. This program can be a strategy to increase recognition of and help seeking for mental health problems. **Aims:** To reflect about the experience, both quantitative and qualitative, of a sample group of students in their third year of secondary education who have participated on an educational programme based on direct contact with people affected by a mental disorder.

Methods: An interventional pilot programme is proposed, with longitudinal prospective follow-up, quasi-experimental and with control group. Its efficiency is to be measured on the Patrick Corrigan AQ-C8 scale, in paired samples design at baseline, immediately after the intervention and at 6 months of follow-up.

Results: Quantitative results are described. Students ($n = 308$) refer a high degree of satisfaction with each of the exercises of the program: Brainstorm ($5, 31 \pm 1340$), Coloured figures ($5, 18 \pm 1438$), Label's game ($6, 23 \pm 1202$), Positive things ($5, 59 \pm 1248$), Video ($6, 14 \pm 1180$) and Direct dialogue ($6, 55 \pm 0969$). The two activities which are linked to direct interaction with self-experts were the most valorised.

Qualitative results show that students are interested on this kind of programmes. They demand more information and more prolonged interventions. They outline the importance of interaction with people with lived experience.

Conclusions and limitations: The intervention has been a positive experience to students who participated, facilitating literacy and comprehension of mental health issues as well as erasing stigma.

It would be interesting to evaluate the impact on the behavior and help seeking attitudes.

References

- Ross AM, Hart LM, Jorm AF, Kelly CM, Kitchener BA (2012) Development of key messages for adolescents on providing basic mental health first aid to peers: a Delphi consensus study. *Early Interv Psychiatry* 6(3):229–238
- Jorm AF, Wright A, Morgan AJ (2007) Beliefs about appropriate first aid for young people with mental disorders: findings from an Australian national survey of youth and parents. *Early Interv Psychiatry* 1:61–70
- Perry Y, Petrie K, Buckley H, Cavanagh L, Clarke D, Winslade M, Christensen H (2014) Effects of a classroom-based

educational resource on adolescent mental health literacy: A cluster randomised controlled trial. *J Adolesc* 37(7):1143–1151

PT-137

What is the best protective factor(s) in childhood sexual abuse and suicide? Age, gender, family, school?

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Childhood sexual abuse (CSA) is a devastating life experience resulting with higher incidences of mental disorder and suicide attempt but some of factors may diminish those of outcomes. We hypothesized that victims who have been receiving family support, continuing to social functioning would exhibit relatively milder mental disorder and suicide attempts in comparison to subjects who have been lacking of those of features. In addition we proposed that female gender and acquaintance offender might increase risk. We evaluated 181 Turkish children and adolescents with history of CSA regarding age, gender, family and education features. Abuse involving the insertion of an organ or foreign object into the victim's body was designated as a "Qualified Sexual Abuse" (QSA); other form of sexual abuse was designated as a "Basic Sexual Abuse" (BSA). We found that in QSA subgroup suicide attempt were significantly higher in adolescent girls; and age, gender, family integrity, education level were not protective for mental disorder. Among BSA patients family integrity, school involvement, offender's relationship and possessing any mental disorder statistically influenced suicide attempts but family integrity was the strongest one. Suicide attempt was approximately 10 times higher ($p = 0.005$, $CI = 95\% [2.020-51.051]$, $OR = 10.154$) in the victims living in broken families. Family integrity and school attendance were also noted as protective factors against mental disorder in BSA patients. The incidence of mental disorder was 3.5 times higher in children who have not been attending to school ($p = 0.009$ $CI = 95\% OR = 3.564$). In conclusion we found that family integrity and school attendance weakly, %9 to %20, account for psychopathology in BSA victims but not in QSA survivors, and adolescents girls are risky group.

Keywords: Family, School, Education, Suicide, Childhood sexual abuse.

PT-138

Why are the stepmothers portrayed as a bad character in both eastern and western fairy tales?

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Cinderella's fairy tale is globally loved. In the fairy tale, the bad queen is portrayed as a typically evil stepmother. Nowadays, the number of stepparents has been increasing and children have therefore had more opportunities to be exposed to a stepmother. However, are stepmothers really that bad?

This study investigated the basis of the prejudice against and misunderstanding of the stepmother, by the comparison of the characteristics of the stepmothers who appear in Grimm's fairy tales (GFT) and in Korean traditional ones (KFT).

Our analysis involved a comparison of the fairy tales that appear in the 'Kinder- und Hausmärchen' compiled by Grimm brothers of Germany and 'The collection of Korean traditional fairy tales'. The GFT contains a total of 210 fairy tales, in 15 of which a stepmother appears, whereas a stepmother features in 15 of the fairy tales among the 15,107 fairy tales that appear in the KFT.

For the purpose of our analysis, the types of abuse practiced by the stepmothers were classified according to five types, four of which, namely physical, emotional, and sexual abuse, and neglect, are based on the types of child abuse considered by the United States Department of Health and Human Services, whereas the last category that was included in our work was homicide in the case of murder.

An investigation of the role of the child's gender indicated that daughters were abused about five times more than sons in GFT, as

opposed to KFT in which daughters are abused about twice as many times as sons.

Only one of the stepmothers in the KFT is depicted as a good person.

The 12 stepmothers in the 15 GFT abused the children of the ex-wives because of jealousy, whereas the 12 stepmothers in the 15 KFT abused the children because of property.

In GFT, the type of child abuse was found to be physical abuse in 12 of the fairy tales, homicide in three fairy tales, emotional abuse in one fairy tale, with one other fairy tale that could not be classified, whereas KFT were found to involve physical abuse in six cases, emotional abuse in six cases, homicide in one case, and the remaining three fairy tales could not be classified.

In both German and Korean tales, the stepmother is mostly depicted as a bad character, causing children to attach an inappropriate stigma to stepmothers.

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