



Addressing the complexity of child psychiatry practice in the current landscape

Carmen Moreno¹

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The articles in this issue of ECAP offer unique insights for the clinical practice of child psychiatry. A summary and review of the most relevant, critical aspects follows.

Aydin et al. and Hayes et al. describe strategies that may improve diagnostic practices and patient engagement in child psychiatry [1, 2]. Aydin et al. conducted a chart review ($N=723$) of patients treated at specialised mental health care in the Netherlands between 2015 and 2017 and explored the diagnostic informative value of referral letters to child and adolescent psychiatry from general practitioners [1]. They found that diagnostic classification was aligned with at least one reason for referral in over half of the cases and had the highest predictive value for predicting eating disorders and the lowest for behavioural problems. Referral letters frequently mentioned other school or family-related problems that also affected diagnostic accuracy. Correlation with mental health diagnoses did not depend on illness characteristics, age, or gender except for better prediction of ADHD with increasing age. This investigation highlights the value of coordination with general practitioners and the need to foster and use instruments to systematise referrals. Hayes et al. examined the theory, intervention functions and behaviour change techniques used to facilitate shared decision-making in child and youth mental health practice [2]. They found that the proportion of interventions incorporating theory was higher than previously reported, that the most common behaviour change technique was evaluation of pros and cons and that education and enablement were the most common intervention functions. However, support for these conclusions is only tentative, due to the low quality of most of the studies so far, and therefore we need more knowledge

of how to increase participation by children and adolescents in mental health decision-making.

A good proportion of the articles in this number of the journal analyse the relationship between social factors, family dynamics and psychiatric disorders in children and adolescents. González et al. assessed the effect of multidimensional poverty and the role of the family environment on the mental health of children aged 7–11 years in two areas of Spain [3]. They found a significant increase in both internalising and externalising problems in children with a higher family risk of poverty and social exclusion and with lower quality in the family context. In fact, risk of poverty and social exclusion together mediated 42% of internalising and 62% of externalising problems, and were also related to higher parental stress, which was in turn related with higher risk of internalising and externalising problems. However, a worse socioeconomic situation did not affect internalising problems in those children from families living in better physical environments and with social support. This suggests that improving the immediate environment such as neighbourhoods and schools and promoting positive parenting programmes may have a protective effect on mental health in childhood. Bayer et al. reported on a follow up of a population-based sample of temperamentally inhibited preschool children in which they found significant risk of developing anxiety (57%, 246/430) and depressive problems (22%, 95/432) into mid childhood [4]. Among a variety of potential etiological factors, including sociodemographic and traumatic events, parent distress and parenting practices (overinvolved/protective parenting, harsh discipline) were related with internalising outcomes. In the case of depression, the presence of child health/developmental problems was also predictive (yes/no, OR 4.21, [1.36, 12.85]; 77%), adding to parent-related variables. Flynn et al. sought to determine the impact of attention deficit hyperactivity disorder (ADHD) and tonic irritability, as assessed by ecological momentary assessment (EMA), on child-related parenting stress domains [5]. In their study, children with ADHD

✉ Carmen Moreno
cmoreno@hggm.es

¹ Department of Child and Adolescent Psychiatry, Institute of Psychiatry and Mental Health, IISGM, CIBERSAM, ISCIII, School of Medicine, Hospital General Universitario Gregorio Marañón, Universidad Complutense, Madrid, Spain

demonstrated greater tonic irritability on the EMA-derived measure of irritability, whereas ADHD was associated with maternal report of stress related to child difficulties only due to its relation with tonic irritability. Articles by Bayer et al. and Flynn et al. highlight the impact of raising a child with developmental problems on family dynamics and the need to refine the potential contribution of symptomatology that may constitute specific treatment targets [4, 5].

The impact on children's mental health of an important environmental factor, the COVID-19 pandemic, also figures in this number of ECAP, which includes two articles exploring predictors of symptomatology using pre- and post-pandemic data [6, 7]. In the first one, McArthur et al. reported on data from a birth cohort followed up for 9–11 years postpartum in Calgary, Canada [6]. In analyses controlled for pre-pandemic symptomatology, they found that connectedness to caregivers predicted child anxiety symptoms (together with child sleep and child screen time), child depressive symptoms (together with child screen time) and child happiness during COVID-19 evaluation. Child age, sex, and past psychopathology did not change the results. Interestingly, well-established child mental health factors such as family income, maternal mental health or peer interactions were not related to child psychopathology in this study. Instead, proximal factors were more important, highlighting the role of parent–child connection as a protective factor during this specific situation. In the second one, Westrupp et al. examined the impact of COVID-19 on Australian parents' ($N = 2365$) and children's (0–18 years) mental health and family functioning [7]. During the pandemic, as compared with pre-pandemic estimates from four Australian population-based cohorts, parents showed higher rates of depression, anxiety, stress and alcohol consumption, as well as higher parenting irritability and lower family positive expressiveness. Worse parent functioning and family relationships were associated with previous mental health and physical conditions in parents, psychological and environmental stressors related to COVID-19, worse financial situation, and housing dissatisfaction. Higher child mental health anxiety and depression were related to parent health conditions and COVID-19 stressors, but also with having an autism spectrum disorder or ADHD diagnosis, which was in turn associated with worse family functioning. These articles support the conclusion that previously vulnerable families, financially or due to struggling with mental health conditions, have been more harmed by the COVID-19 pandemic.

The work by Revet et al. suggests that the impact of the pandemic on youth mental health may be even higher in the post-pandemic period [8]. In their report of a longitudinal study to determine the impact of the COVID-19 pandemic on child and adolescent psychiatry services in Europe, a second wave questionnaire (February/March 2021) suggests that, compared with 2020, care delivery

was only minimally affected and some new methods of care delivery such as telemedicine were widely adopted, yet there was an important perceived increase on mental health and psychopathology, particularly suicidal crises, anxiety disorders, eating disorders and major depressive episodes, coupled with an increase in the number of referrals. Managing the long-term consequences of this crisis will require supporting vulnerable populations but, even more importantly, meeting increased demand coupled with a widespread shortage of child and adolescent mental health specialists.

Finally, two articles report on school-based interventions [9, 10]. Elsenburg et al. presented the results of a 2-year school-based comprehensive approach implemented in schools in a deprived neighbourhood in Amsterdam targeting the school and also the neighbourhood and homes [9]. This programme, focusing on social and emotional competencies, showed improvement in quality of life and psychosocial problems in participating children (five schools, $n = 614$) by the end of the 2-year intervention as compared with the starting point. However, a final assessment performed some months after the end of the intervention showed that improvements did not last, with levels in outcome variables returning to baseline. Although the lack of a control group limits the conclusions, it seems clear that the complex interplay between poverty, health and academic outcomes calls for integrated approaches. Given the nature of the social determinants and their resistance to change, interventions may need to target structural changes more sustained over time to show enduring effects. Cogo-Moreira et al. evaluated a drug abuse prevention programme integrated in the school curricula and based on the Comprehensive Social Influence Model, in adolescents attending public schools in six Brazilian cities, as compared to the regular curriculum [10]. This intervention, called #Tamojunto, includes skills training, instructions in decision-making, and public commitment components. The intervention did not prove efficacious on the main outcome of changing the interplay between drug use and violence. However, the authors report that early violence predicted future increased drug use in both the intervention and the control conditions, which calls for including early violence behaviours as a target of preventive drug use programmes. A potential limitation of this study may be the fact that questionnaires were completed by adolescents [10]. In fact, in this same number of ECAP, Kuitunen-Paul et al., explored the correlation between parents' and adolescents' self-reports in adolescents with substance use disorders and found only a small association between adolescent and parent reports of dissocial behaviour, with parents reporting stronger aggressive behaviours than adolescents, with no differences in reporting of most internalising problems [11]. In adolescents with substance use problems, combining parental and self-reports may allow for a more accurate

characterization of frequently comorbid externalising problems and may allow for better treatment plans.

The articles included in this ECAP issue explore the relationship between socioeconomic and family factors as risk factors for psychopathology in children and adolescents. They highlight the need to address this complex relationship when developing treatment interventions, to ensure interventions are appropriately targeted, relevant, feasible and durable. They also support the notion that the impact of social conditions is particularly relevant in previously vulnerable populations, such as parents with mental health problems or children with health or neurodevelopmental disorders. This holds true for the impact of the COVID-19 pandemic on parent and youth mental health. How we, as child and adolescent mental health care providers, can improve treatment delivery in a collaborative and efficient manner in the current context of increase of demand remains a central matter of debate and exploration.

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References

1. Aydin S, Crone MR, Siebelink BM, Numans ME, Vermeiren RRJM, Westenberg PM (2023) Informative value of referral letters from general practice for child and adolescent mental healthcare. *Eur Child Adolesc Psychiatry*. <https://doi.org/10.1007/s00787-021-01859-7>
2. Hayes D, Edbrooke-Childs J, Town R, Wolpert M, Midgley N (2023) A systematic review of shared decision making interventions in child and youth mental health: synthesising the use of theory, intervention functions, and behaviour change techniques. *Eur Child Adolesc Psychiatry*. <https://doi.org/10.1007/s00787-021-01782-x>
3. González M, Estarlich M, Murcia M, Barreto-Zarza F, Santa-Marina L, Simo S, Larrañaga MI, Estefanía Ruiz-Palomino E, Ibarluzea J, Rebagliato M (2023) Poverty, social exclusion, and mental health: the role of the family context in children aged 7–11 years INMA mother-and-child cohort study. *Eur Child Adolesc Psychiatry*. <https://doi.org/10.1007/s00787-021-01848-w>
4. Bayer JK, Prendergast LA, Brown A, Bretherton L, Hiscock H, Nelson-Lowe M, Gilbertson T, Noone K, Bischof N, Beechey C, Muliadi F, Mihalopoulos C, Ronald M, Rapee RM (2023) Prediction of clinical anxious and depressive problems in mid childhood amongst temperamentally inhibited preschool children: a population study. *Eur Child Adolesc Psychiatry*. <https://doi.org/10.1007/s00787-021-01857-9>
5. Flynn MM, Rosen PJ, Reese JS, Slaughter KE, Alacha HF, Olczyk AR (2023) Examining the influence of irritability and ADHD on domains of parenting stress. *Eur Child Adolesc Psychiatry*. <https://doi.org/10.1007/s00787-021-01868-6>
6. McArthur BA, Nicole Racine N, McDonald S, Tough S, Madigan S (2023) Child and family factors associated with child mental health and well-being during COVID-19. *Eur Child Adolesc Psychiatry*. <https://doi.org/10.1007/s00787-021-01849-9>
7. Westrupp EM, Bennett C, Berkowitz T, Youssef GJ, Toumbourou JW, Tucker R, Andrews FJ, Evans S, Teague SJ, Karantzas GC, Melvin GM, Olsson C, Macdonald JA, Greenwood CJ, Mikocka-Walus A, Hutchinson D, Fuller-Tyszkiewicz M, Stokes MA, Olive L, Wood AG, McGillivray JA, Sciberras E (2023) Child, parent, and family mental health and functioning in Australia during COVID-19: comparison to pre-pandemic data. *Eur Child Adolesc Psychiatry*. <https://doi.org/10.1007/s00787-021-01861-z>
8. Revet A, Johannes Hebebrand J, Anagnostopoulos D, Kehoe LA, Gradl-Dietsch G, COVID-19 Child and Adolescent Psychiatry Consortium, Klauser P (2023) Perceived impact of the COVID-19 pandemic on child and adolescent psychiatric services after 1 year (February/March 2021): ESCAP CovCAP survey. *Eur Child Adolesc Psychiatry*. <https://doi.org/10.1007/s00787-021-01851-1>
9. Elsenburg LK, Galenkamp H, Abrahamse ME, Harting J (2023) Longitudinal changes in quality of life and psychosocial problems of primary school children in a deprived urban neighborhood over the course of a school-based integrated approach. *Eur Child Adolesc Psychiatry*. <https://doi.org/10.1007/s00787-021-01853-z>
10. Cogo-Moreira H, Gusmões JD, Valente JY, Eid M, Sanchez ZM (2023) Does #Tamojunto alter the dynamic between drug use and school violence among youth? Secondary analysis from a large cluster-randomized trial. *Eur Child Adolesc Psychiatry*. <https://doi.org/10.1007/s00787-021-01863-x>
11. Kuitunen-Paul S, Eichler A, Wiedmann M, Basedow LA, Roessner V, Golub Y (2023) Comparing self-report and parental report of psychopathologies in adolescents with substance use disorders. *Eur Child Adolesc Psychiatry*. <https://doi.org/10.1007/s00787-021-01865-9>