

## Child and adolescent psychiatry in ICD-11: an opportunity to overcome mistakes made in DSM-5?

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Published online: 1 August 2016  
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As in previous issues of European Child and Adolescent Psychiatry (ECAP) each article is based on an existing classification system, i.e., ICD and/or DSM. Furthermore, even the core aims of some of the articles directly pertain to questions related to the diagnostic classification. For example, Algorta et al. [1] aimed to improve the diagnostic efficiency of the parent-rated Strengths and Difficulties Questionnaire (SDQ) to identify attention deficit hyperactivity disorder (ADHD) by developing scoring weights for clinical practice in a representative sample for the United Kingdom.

While some articles of the present issue deal with diagnoses such as tic disorders [3] or anorexia nervosa [10] that have a good clinical diagnostic accuracy, some of the other articles are based on less reliable and valid diagnoses and therefore are more dependent on the quality of the respective classification system [e.g., 4, 13]. The quality of these systems, also known as psychiatric nosology or taxonomy, is still an ongoing matter of debate and research, because the search for biomarkers of mental disorders continues to be a very demanding challenge even if we recognize that “behavior is a biomarker just as objective as pulse or cardiac ejection fraction, albeit much harder to measure” [12]. Furthermore, in addition to this difficulty the complexity of processes and factors underlying behavior (e.g., in contrast to blood glucose in diabetes) has opened the doors

for the development of different conceptual approaches leading to different approaches to classification [11]. One common approach, that assumes the existence of specific biomarkers, is to establish essential categories containing necessary and sufficient items. However, as pointed out above, such biomarkers are still lacking and the substantial comorbidities as well as the limited utility for clinical practice in developing countries renders this approach less useful. In contrast, a “critical” approach assumes that categories cannot be established in a strictly empirical manner and thus are rather built based on consensus or expert opinions which are both under the influence of cultural norms. Again, this approach may not be ideal to improve mental health on the long-term. Instead of the two extremes a desirable approach would be similar to that in general medicine that accounts for the challenge of classification and its related advantages and applications as well as the perspective that advances in research will lead to an advanced classification system [12].

The existing classification systems, ICD-11 and DSM-5 differ in their emphasis on either clinical utility and usability (ICD-11) or diagnostic validity (DSM-5). Yet, clinical utility requires diagnostic validity and the two systems partly overlap [12]. Despite some overall agreement, there are some general and several specific differences between ICD and DSM, both between their current and planned versions. In this context, some experts criticized over the last decades that the divergence of ICD and DSM was not an inevitable necessity, but rather an unfortunate “historical accident” [5]. Although the differences are relatively simple, they complicate both research and clinical care. Thus, there was a strong need for consensus which could have potentially been achieved by using simultaneous time line of preparation and harmonization of the revisions of ICD-11 and DSM-5. For example, this was reflected by the fact

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that the ICD-11 and DSM-5 groups working on the chapter “neuropsychiatric disorders” held some joint meetings and agreed on a revision of the overall table of organization. But several differences in, e.g., sponsors (the American Psychiatric Association, APA; and the World Health Organization, WHO), aims (exclusively mental disorders vs. complete medical pathology) and cultural background (more homogeneous first world countries vs. the whole world) prevented this harmonization. In practical terms, at the joint meetings the definitions of the disorders and the extent to which they should be included have not been comprehensively coordinated. While the DSM-5 has been published in 2013, the revision process to prepare ICD-11 is still ongoing.

This also leads to the consequence or opportunity, that the ICD-11 working groups, particularly that on “Mental and behavioral disorders”, have to decide to either aim for increased compatibility with DSM-5, or to make their own independent decisions. Although harmonization would be a high priority, “...DSM-5 has made many controversial decisions that are scientifically unsupported and clinically unsafe and ICD-11 would be well advised not to follow its lead...” [5]. From our point of view the process of coordination and inclusion of more experts could and should be harmonized. Several experts criticized, e.g., that “...the DSM-5 decisions were based on a secretive and closed process that minimized risks while overvaluing hypothetical benefits...” [5].

Moreover, conceptual issues, e.g., regarding the emphasis on reliability of clinically relevant thresholds or the reliance on clinical judgment of each individual case [described in the system of Westen, 16] should be addressed [7]. Some disorders such as disruptive mood dysregulation disorder were included in DSM-5 due to the special needs in the United States despite criticism based on the low test–retest reliability in field trials and the concern of potentially “pathologizing” normal conditions. Other disorders such as attenuated psychosis syndrome have not been included although reliability was moderate [7]. Also, a combined dimensional and categorical approach should be aimed at fulfilling both empirical and practical needs as has been realized in the DSM-5 for personality disorders but has not been applied in several other relevant disorders such as depression [2]. To agree on an overall quality level, first these conceptual issues should be solved at a more general level in an overarching working group or steering committee, rather than be delegated to the deliberations of the specific working groups. The establishment of such an overarching working group for conceptual issues has already been proposed for DSM-5 [6], but was not implemented. With the inclusion of experts in transcultural psychiatry, politicians, decision makers, etc., the establishment of such a workgroup would be an important first step [7].

Additionally, field trials should get much more attention, time, and funding. This emphasis should mirror the tremendous consequences of results of field trials for both clinical care as well as for the large amount of funded future research projects [9]. During the revision of DSM there were continuous warnings of experts on the way how field trials were initiated, performed and their results considered in the further processes of revision. They claimed that the planned field trials were performed under such a high time pressure that they were not able to measure the impact on diagnostic rates which may have reduced the reliabilities of the diagnostic categories [5].

Despite these warnings and wishes for improvements beyond DSM-5, to date there is a current ICD-11 beta version [17], which in several ways is not building on the progress made by DSM-5, but could rather be seen as a step backwards.

In the following section we will illustrate the above mentioned critique on ICD/DSM from our personal perspective as experts on tic disorders (TD) including Tourette’s disorder (DSM-5) by using these psychiatric disorders as examples. As mentioned in the first article of the present issue of ECAP by Evans et al. [3] TD are neurodevelopmental conditions not only characterized by the presence of tics but also of associated behavioral problems. While quality of life (QoL) profiles in children often reflect the impact of comorbid ADHD symptoms, adults’ QoL seems to be more strongly affected by comorbid depression and anxiety. In both children and adults, on average the tics themselves have less impact on QoL. Altogether these facts are strong arguments to list TD in the chapter of the child and adolescent psychiatric disorders in both ICD and DSM.

While in the revision process of DSM-5 the suggestion to move TD to “Anxiety and Obsessive–Compulsive Disorders”, if the section “Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence” is not retained, was prevented, unfortunately TD in the beta-draft version of ICD-11 are not listed under the heading “Mental and behavioral disorders”. Instead these groups of disorders have been shifted to “Diseases of the nervous system”—a group of conditions characterized as being in or associated with the nervous system. Here they are listed in the subgroup “Movement disorders”. But this is definitely too short-sighted in view of the broad base of evidence that psychiatric disorders are co-existing in about 90 % of TD patients and—closely related—tics are an indicator of an elevated risk for the development of further psychiatric disorders and problems. Moreover, in several patients the latter are still present but either under recognized or not sufficiently reported. For diagnostic and treatment decisions it has to be considered that on average even subclinical comorbid problems have a greater impact on QoL than

the tics themselves (see this issue [3]) [15]. Therefore, this classification has to be regarded as a step backwards.

We have proposed further developments to continue the positive revisions in DSM-5 in our comment “Tourette’s disorder and other tic disorders in DSM-5” published in ECAP [8] and in a revised version elsewhere [9]. Our proposals could not be evaluated yet because these details of ICD-11 are still missing. For example, both diagnostic options would be logical and valuable: (1) provisional TD, if tics are present for less than 1 year at the time point of diagnosis, and (2) transient TD, if tics *were* present for less than 1 year. Further classificatory problems for TD will be illustrated in the following.

One important problem of classificatory evidence concerns the duration criterion of TD. Since the retrospective differentiation of tic-free intervals is often difficult and in clinical practice mostly neglected when a diagnosis is made, we very welcome the revision that in DSM-5 a diagnosis of chronic TD can be made if tics persist for more than 1 year regardless of the length of a tic-free period during that time. But again, more research is needed on phenomenology, prognostic factors, etiology, and pathophysiology of transient TD that might reveal their differences to chronic TD. This would help not only to answer classificatory questions but also to improve our knowledge on individual prognosis.

A second classificatory problem is the implementation of pathophysiological or even causal considerations although the underlying evidence is very limited. In DSM-5 tics should not be caused by direct physiological effects of a substance (e.g., stimulants) or a general medical condition (e.g., Huntington’s disease or postviral encephalitis). In this context the frequently voiced criticism on the formerly planned introduction of a new category “Substance-Induced Tic Disorder” and “Tic Disorder Due to a General Medical Condition” was partly successful. DSM-5 now states “When there is strong evidence from the history, physical examination, and/or laboratory results to suggest a plausible, proximal, and probable cause for a TD, a diagnosis of other specified TD should be used.”

A third classificatory problem is the unresolved question if TD classification should follow clinical and/or research purposes. We appreciate that also DSM-5 is in accordance with DSM-IV-TR that had already dropped the requirement of tics to cause clinically significant impairment. This is especially important for characterizing the individual patient comprehensively, e.g., there is a lot of evidence that tic-associated and non-tic-associated OCD are different subtypes and require different treatment approaches [14, 15]. In addition, it is of relevance for research purposes (e.g., questions of familial aggregation) because a child without a significant clinical impairment whose presentation clearly meets the tic symptomatology criteria for TD

can be diagnosed without significant impairment from the tics. This has been underlined by recent research showing that often not the tics themselves but comorbid conditions such as ADHD are associated with social and academic impairment [8].

## Conclusion

We hope we could—like others—highlight why ICD-11 diagnoses also in the field of child and adolescent psychiatry can and must be a step forward—learning from the mistakes in preparing DSM-5 rather than perpetuating them. ICD-11 must aim for a higher standard of scientific quality before changes are determined, implement a higher standard of organizational processes, i.e., to come to better overarching theoretical decisions that should be followed by all working groups, ensure a greater openness of process, and be more responsive to differing viewpoints. Actually the WHO personnel and financial budget for ICD-11 is not sufficient (also compared to DSM-5). Therefore, the WHO should urgently rethink the financial support and time line particularly when considering the enormous long lasting consequences of publishing a non-optimal version of ICD-11.

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