The Need for Research on PTSD in Children and Adolescents: A commentary on Elliot et al., 2020

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The recent release of the 11th version of *The International Classification of Diseases* (ICD-11: WHO, 2018) marked a significant departure from the previous similarities between it and the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5; APA, 2013) in terms of their conceptualization of posttraumatic stress disorder (PTSD). The ICD-11 proposed a reduced symptom set for PTSD and a sibling disorder called Complex PTSD. There have been numerous studies that have provided support for the integrity of, and distinction between, PTSD and CPTSD diagnoses in adult samples. Elliot and colleagues (2020) have added to the research literature by providing a valuable examination of the differences between ICD and DSM PTSD/CPTSD in a sample of youth aged 8 to 17 years. This commentary reviews this study and reflects on the need for greater understanding of developmental changes in the presentation of PTSD and Complex PTSD.

As described previously in this journal (Danzi & La Greca, 2016; Elliott et al., 2020), the most recent revisions of posttraumatic stress disorder (PTSD) in *The International Classification of Diseases* (ICD) and the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) differ from one another in conceptually substantial ways. Both include the requirement that the diagnostic criteria be empirically supported and clinically useful, i.e., observable, reliable and easily translatable into a treatment plan. However, the fifth edition of the DSM (DSM-5; APA, 2013) has significantly broadened the number and range of symptoms included in PTSD, intending to account for the wide variety of symptoms associated with trauma-affected populations. In contrast, the eleventh edition of ICD (ICD-11: WHO, 2018) has streamlined the number of symptoms and clusters which describe posttraumatic stress and responded to the heterogeneity of trauma-related symptoms by organizing them into two distinct disorders, PTSD and complex PTSD (CPTSD). The consequences of these differences for trauma-affected youth are just beginning to be explored.

A direct comparison of the DSM-5 and ICD-11 diagnostic requirements for PTSD was conducted in a sample of 7 to11 year old children exposed to Hurricane Ike (La Greca, Danzi,

& Chan, 2017). Confirmatory factor analysis indicated that ICD-11 had the best-fitting model, and that it demonstrated strong measurement invariance across gender, although the DSM-5 model fit was also acceptable. Children who met PTSD criteria under DSM-5 appeared to show greater comorbidity with anxiety and depression than children who met ICD-11 PTSD criteria. In children of this age exposed to Hurricanes Ike or Charley, like in other trauma-exposed samples of similar age (Brewin et al., 2017), rates of ICD-11, DSM-IV, and DSM-5 PTSD were similar (Danzi & La Greca, 2016).

Studies based on treatment-seeking samples appear to paint a different picture. For example, in a recent study different diagnostic rules were examined in a group of adolescents and young adults with a history of physical or sexual abuse and diagnosed with PTSD according to DSM-IV and ICD-11 (Eilers et al., 2020). ICD-11, relative to DSM-IV, resulted in a large drop in probability of receiving a PTSD diagnosis, primarily due to not meeting the sense of threat criterion. A problem with this study is that there was pre-screening of the sample using DSM-IV criteria, which may have introduced bias.

To date, the validity of the PTSD/CPTSD distinction has been supported in at least four child and adolescent samples (e.g., Haselgruber, Sölva, & Lueger-Schuster, 2020; Kazlauskas et al., 2020; for other studies see Brewin et al., 2017) using techniques such as confirmatory factor analysis and latent class analysis. Haselgruber et al. (2020) reported that the CPTSD group showed higher rates of childhood trauma, comorbid psychopathology, and functional impairment. In Kazlauskas et al.'s (2020) sample the CPTSD group were more likely to have experienced or witnessed physical abuse. Further evidence for discriminant validity was provided by Eilers et al. (2019) who found that the CPTSD group showed more evidence of dissociation, depression symptom severity, and additional comorbid diagnoses.

The report by Elliot and colleagues (2020) provides an exploration of the differences between ICD and DSM among youth aged 8 to 17 years as related to functional impairment and to the types of symptoms included in the diagnostic profile. The study assessed prevalence rates of the new ICD-11 diagnoses compared to those of ICD-10 as well to DSM-IV and DSM-5 at nine weeks following a visit to an emergency department for a single trauma (e.g., motor

vehicle collision, assault, dog attack). Consistent with the conceptualization of CPTSD, its incidence following the single trauma was low ($n = 5$) and associated with previous trauma and/or psychological difficulties. Four of the five children had a prior history of trauma and four of the five had experienced mental health concerns prior to the index trauma. A further prediction was that the focus on "core symptoms" in ICD-11 relative to ICD-10 would increase the specificity of the prediction and indeed the ICD-11 formulation did provide modest improvement in the specificity of diagnosis. One important limitation of the study is that ICD-11 requirements were estimated from items written for other instruments, and in some cases these diverged markedly from ICD-11 specifications.

The findings that bear more detailed discussion are the differences in rates of disorder across the various formulations of PTSD. The comparison to ICD-10 is of interest as ICD-10 PTSD does not include a functional impairment criterion. The absence of a functional impairment criterion can increase the rates of identified disorder but reduce its clinical utility since one clinically meaningful aspect of diagnosis is whether or not the disorder identifies people whose functioning is impaired in one or more areas of life. The report indicated that of 203 youth assessed at week 9, 11% (n=23) were diagnosed with ICD-10 while 7% (n =15) were diagnosed with ICD-11 and this difference was significant. However, the ICD-11 PTSD rates did not differ from DSM-IV (8.7%) and DSM-5 (9.6%) diagnoses, both of which have a functional impairment requirement. A direct comparison of ICD-10 versus ICD-11 revealed that 13% of those diagnosed with ICD-10 did not meet the ICD-11 impairment requirement which may in part explain the higher prevalence of ICD-10.

Discrepant prevalence rates are also likely related to differences in the number and type of symptoms associated with each cluster, particularly that for re-experiencing. Elliot and colleagues report that of all those who met full ICD-10 criteria, 78% met the re-experiencing cluster of ICD-11, 100% met the avoidance cluster and 91% met the sense of threat cluster. The avoidance cluster symptoms were operationalized identically, thus leading inevitably to 100% agreement. In ICD-11, the cluster related to a sense of

ongoing threat involves hypervigilance and exaggerated startle, but does not include the symptoms of poor sleep, poor concentration, and irritability/anger. The purpose was to make the symptom cluster more specific and omit more general symptoms of heightened arousal that overlap with other anxiety disorders and depression. The elimination of these latter symptoms seems not to have affected the proportion of individuals who are positive on the cluster to any substantial degree.

The percent of participants designated as positive on the re-experiencing cluster is substantially reduced compared to ICD-10 and deserves some consideration. ICD-11 highlights the sensory-perceptual nature of the symptoms which are exemplified by flashbacks, nightmares and vivid intrusive memories with a "here and now" quality. The ICD-11 re-experiencing cluster does not include intrusive thoughts about the event broadly defined (e.g., repetitive, automatic or ruminative thoughts), as such types of experiences are commonly found in other disorders (e.g. depression, adjustment disorder). In addition, the presence of emotional or physiological reactivity to trauma-related symptoms is excluded except for cases where a clear memory of the event is absent (e.g., the event occurred in early life, or was concurrent with a head injury or drug use).

The revision of the ICD-11 PTSD was intended to refine the disorder to a symptom profile that limited overlap with symptoms of other disorders and for which current treatments might show enhanced efficacy. However, the lower prevalence rate of ICD-11 PTSD compared to ICD-10 PTSD may cause concern about reduction in access to or support of mental health services for trauma-affected youth. This concern may be not be too worrisome, however. First, ICD-11 has identified several disorders that fall under a diagnostic section called "Disorders Specifically Related to Stress" which includes not only PTSD and Complex PTSD but also Prolonged Grief Disorder and Adjustment Disorder. This spectrum, along with depression and other anxiety disorders, is expected to capture the diversity of symptoms related to traumatic stress and to lead to more precisely targeted treatments for the young people who need them. It will nevertheless be important to ascertain whether there

remains a group who are diagnostically sub-threshold in respect of all disorders and who might therefore miss out on treatment in countries in which care is contingent on receiving a diagnosis.

A second, more pragmatic consideration is that assessment of children and adolescents for the purposes of providing treatment is rarely contingent only on a diagnosis but often includes consideration of the presence of symptoms and their relationship to functional impairment. A symptom-oriented approach reduces the sense of stigma that some youth and their family members experience, and avoids having treatment contingent upon a categorical determination (presence/absence of diagnosis), when the symptoms and problems that youth experience are subject to fluctuation and change due to developmental influences. Indeed, the recent ISTSS Treatment Guidelines for PTSD (ISTSS, 2018) supported the inclusion of treatment studies in which participants were reported to be experiencing either partial or full DSM or ICD PTSD due to the recognition that subsyndromal levels of disorders are often associated with functional impairment, and access to treatment includes consideration of the presence of impairment as well as of a diagnosis.

Future research is needed that carefully assesses the prevalence of the full range of disorders related to stressors among youth to enable the development of mental health resources appropriate to need. This will require the use of clinical samples with trauma exposures of different types, severity and frequency and an evaluation of measures developed specifically for children and adolescents such as the International Trauma Questionnaire for Children and Adolescents (ITQ-CA: see Kazlauskas et al., 2020). In addition, assuming the symptom profiles established by the ICD-11 spectrum describe distinct clinical entities, exploration of the relationship of functional impairment to symptom number and severity during different developmental periods will help establish and potentially revise thresholds for diagnostic status that are developmentally sensitive.

More generally, there is much to be learned about the nature and changing presentation of PTSD and CPTSD in children of different ages. The inclusion of separate criteria for pre-school children in DSM-5 is an important advance, but the needs of the pre-adolescent age group have received less attention (Danzi & La Greca, 2016). Detailed clinical investigation is required on which to base distinct age-based diagnostic guidelines. The fact that the overlap in the children currently identified by DSM and ICD diagnostic requirements is modest is another sign that we should be very cautious about imposing adult-derived observations and rules on children and adolescents.

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5)*. American Psychiatric Publications. Washington D.C.

Brewin, C. R., Cloitre, M., Hyland, P., Shevlin, M., Maercker, A., Bryant, R. A., … Reed, G. M. (2017). A review of current evidence regarding the ICD-11 proposals for diagnosing PTSD and complex PTSD. *Clinical Psychology Review, 58*, 1–15. doi:10.1016/j.cpr.2017.09.001

Danzi, B. A., & La Greca, A. M. (2016). DSM-IV, DSM-5, and ICD-11: Identifying children with posttraumatic stress disorder after disasters. *Journal of Child Psychology and Psychiatry, 57*, 1444–1452. doi:10.1111/jcpp.12631

Eilers, R., Rimane, E., Vogel, A., Renneberg, B., Steil, R., & Rosner, R. (2020). The impact of the new ICD-11 criteria on abused young people: 30% less PTSD and CPTSD diagnoses compared to DSM-IV. *Psychotherapy and Psychosomatics, 89*, 59-61. doi: 10.1159/000503794

Elliott, R., McKinnon, A., Dixon, C., Boyle, A., Murphy, F., Dahm, T., … Hitchcock, C. (2020). Prevalence and predictive value of ICD-11 post-traumatic stress disorder and Complex PTSD diagnoses in children and adolescents exposed to a single-event trauma. *Journal of Child Psychology and Psychiatry*. doi:10.1111/jcpp.13240

Haselgruber, A., Sölva, K., & Lueger-Schuster, B. (2019). Validation of ICD-11 PTSD and complex PTSD in foster children using the International Trauma Questionnaire. *Acta Psychiatrica Scandinavica, 141*, 60–73. doi:10.1111/acps.13100

International Society for Traumatic Stress Studies (ISTSS). (2018). ISTSS PTSD prevention and treatment guidelines: Methodology and recommendations. Retrieved from http://www.istss.org/getattachment/TreatingTrauma/New-ISTSS-Prevention-and-Treatment-Guidelines/ISTSS_May 04 2020.

Kazlauskas, E., Zelviene, P., Daniunaite, I., Hyland, P., Kvedaraite, M., Shevlin, M., & Cloitre, M. (2020). The structure of ICD-11 PTSD and Complex PTSD in adolescents exposed to potentially traumatic experiences. *Journal of Affective Disorders, 265*, 169–174. doi:10.1016/j.jad.2020.01.061

La Greca, A. M., Danzi, B. A., & Chan, S. F. (2017). DSM-5 and ICD-11 as competing models of PTSD in preadolescent children exposed to a natural disaster: assessing validity and co-occurring symptomatology. *European Journal of Psychotraumatology*, *8*, 1310591. doi: 10.1080/20008198.2017.1310591

World Health Organization. (2018). ICD-11: International classification of diseases 11th

    revision. Geneva: World Health Organization. Available at http:/

    www.who.int/classifications/icd/revision/en.