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Posttraumatic Stress Disorder in Children in the Context of the COVID-19 Pandemic

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With its global spread and protracted threat, mounting morbidity and mortality, pervasive social and economic ramifications, vital public health measures, and often compromised risk communication, the COVID-19 pandemic has increased the risk to children's emotional health relative to more common biological, natural, and man-made events. Posttraumatic stress disorder (PTSD) and PTSD symptoms have been the primary focus of child disaster mental health research. The adult literature has questioned the appropriateness of focusing on PTSD in the context of the COVID-19 pandemic, because most of the extensive adult research on PTSD has not appropriately assessed all diagnostic criteria for the disorder.¹ The pandemic experiences of participants in most studies examined in a recent review did not meet the PTSD exposure criterion,¹ which requires that exposure be “directly” experienced, witnessed in person, secondary to the involvement of a close family member or friend, or “repeated or extreme” contact with “aversive details” of the event.² Instead, participants' experiences were primarily indirect (eg, media contact) and constituted fear related to contracting the disease.¹ This concern extends to the relatively few empirical COVID-19 studies of PTSD in children and exemplifies a problem in many child disaster mental health studies, especially those assessing general population samples that primarily comprise children who do not meet the PTSD exposure criterion.

A review of exposure characteristics, PTSD rates, and the assessment of diagnostic criteria in 6 COVID-19 studies that assessed PTSD in general child populations³⁻⁸ evidenced the concerns raised in the adult literature.¹ Only 2 papers provided much detail on participants' COVID-19 experiences or exposure,^{5,6} and none clearly limited the diagnosis of PTSD to participants who met the exposure criterion. In a sample with a sizeable number of children who knew someone who tested positive for, or died of,

COVID-19, 45% scored above the study's threshold for PTSD.⁵ In another study, relatively few Saudi Arabian children personally suffered COVID-19 or had close relatives or friends with the disease, although the authors reported “potential PTSD” in 13.0% of the participants.⁶ Two other studies used scales to assess children's pandemic experiences but provided minimal information on the items queried⁸ or the results.^{3,8} Reported rates of “probable PTSD” were 35.4% in a sample of adolescents in a “severely affected” area of China⁸ and 16.9% in a sample of students in a Chinese community after strict lockdown measures had been lifted.³ Two studies, which noted widespread public health restrictions but failed to describe participants' COVID-19 exposures, found that 20.7% of children from regions across China scored above the study's cutoff for PTSD⁴ and “high risk” for PTSD in 3.16% of a sample of Chinese school children in an area that was not severely affected by the disease.⁷

The 6 child studies varied in assessing other criteria needed to diagnose PTSD, including a specific constellation of symptoms anchored in the traumatic experience, clinically significant distress or impaired functioning, and symptoms for more than 1 month.² All but 1 of the studies³ used well-established tools to assess PTSD. Unfortunately, for the most part, the papers failed to indicate whether and/or how these tools were modified. Only 2 of the scales used included all *DSM-5* symptoms,^{7,8} and only 1 paper considered the requisite constellation of PTSD symptoms.⁷ One study clearly anchored symptoms in the pandemic experience,⁸ and 1 study queried children's pandemic experiences and administered a scale that linked children's symptoms to the coronavirus illness.⁶ The scales used in the other studies linked symptoms to a traumatic or stressful event, but the papers did not indicate whether the assessment referenced COVID-19.^{3-5,7} Most studies identified a cut-off score to indicate probable PTSD with scales that

assessed the presence,^{3,5} frequency,^{6,8} or severity⁴ of endorsed symptoms. To indicate risk for PTSD, 1 study measured the frequency of symptoms and specified a score for the requisite number of symptoms in each of the 4 PTSD symptom clusters.⁷ The scales used in some studies assessed functioning³ or how distressed⁴ or bothered^{7,8} participants were by symptoms, but none of the papers explicitly mentioned measuring or scoring distress or functioning.³⁻⁸ One study assessed symptoms “in the past month,”⁶ 2 studies used scales that specified a 1-month duration,^{3,5} and others referenced⁸ or used scales⁴ with a shorter timeframe. The timeframe in 1 study was unclear.⁷

The extent to which children are likely to meet full criteria for a diagnosis of PTSD related to their COVID-19 experiences remains unclear. It is difficult to reconcile the PTSD rates in the 6 studies with the relatively low levels of *DSM-5* qualifying exposure reported and with the fact that most of the studies did not assess all *DSM-5* PTSD symptoms; most did not specify whether symptoms were linked to the children’s COVID-19 experiences; none explicitly reported including an assessment of distress or functioning in determining diagnostic status; and some did not document the required minimum 1-month duration of symptoms. Indirect experiences and concerns about the pandemic, even in severely affected communities, do not constitute the requisite exposure for PTSD. Moreover, clinical cutoff scores that simply sum endorsed symptoms, and even those that consider the specific number and distribution of symptoms across symptom clusters, do not establish clinically significant outcomes, especially if these symptoms do not cause distress or affect functioning. These concerns do not mean that the assessment of PTSD in general population samples is inappropriate; instead, they caution against overdiagnosis, which has implications for both clinical care and research. Notwithstanding the potential theoretical and clinical importance of individual posttraumatic symptoms and subthreshold outcomes, clinicians should avoid attributing clinical significance to symptoms that may represent normative distress rather than pathology, and researchers should be rigorous in investigating PTSD to avoid contaminating intervention science with misapplied approaches that produce misleading results and inaccurate conclusions.

Children’s experiences (eg, direct exposure vs community effects) and outcomes (eg, psychiatric conditions vs distress) are key considerations in the choice of services used to address their needs. Clinicians must identify and treat those children with psychiatric conditions, whereas trained

school personnel and paraprofessionals commonly deliver resilience-enhancing interventions in nonclinical community settings. Thus, diagnostic considerations are important in planning and delivering services, in selecting interventions, and in personnel decisions. With respect to the COVID-19 pandemic, children who themselves, or whose family members, contract the disease are more likely to require clinical services than those whose only contact with the pandemic reflects generalized concern. Children with pre-existing conditions and past trauma exposure are at heightened risk. It remains unclear whether the rate of PTSD is increasing in the context of this pandemic, but the stress occasioned by it is likely to have lasting implications for many children.

Epidemics, pandemics, and global and novel catastrophes suggest the importance of continued attention to what constitutes trauma exposure. The PTSD exposure criterion has been modified across successive editions of the *DSM*. To underscore the importance of diagnosis in the context of this and future pandemics, it would seem appropriate and prudent to re-examine and consider modifying the PTSD exposure criterion to clarify specifically which, if any, experiences with pandemics should qualify as trauma exposure. Because of the importance of diagnosis in guiding clinical care, researchers should opt for rigor when choosing outcome measures and should be circumspect in interpreting their results. Research is needed to examine whether and how increased stress may contribute to the incidence of PTSD in children in the future.

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