Pediatric PTSD in the DSM-5 and the Forensic Interview of Traumatized Youth

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Since the Third Edition, the Diagnostic and Statistical Manual of Mental Disorders (DSM) has increasingly incorporated developmentally informed criteria for posttraumatic stress disorder (PTSD) because of recognition that children and adolescents can manifest PTSD differently from adults. The most recent edition, DSM-5, among other changes, has introduced a developmental subtype for children six years of age or younger. As pediatric PTSD features very prominently in both civil and criminal proceedings, it is vital that the expert witness be familiar with the updated criteria and know how to interview traumatized youth appropriately in the forensic setting. In this review, we discuss the importance of the evolution of PTSD from past DSM editions to the current one, and the implications of using the new diagnostic criteria and current conceptual models in the forensic evaluation of pediatric PTSD.


Although historical references to the effects of trauma in the pediatric population can be found in literature from the World War II era,1–3 it was not until 1987 that the Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised (DSM-III-R) first recognized that children and adolescents may manifest reactions to trauma in a manner different from adults.4 Subsequent research in the now burgeoning study of PTSD in youth has increasingly illustrated the fundamental importance of a developmental perspective in evaluating trauma syndromes, as different age groups will manifest posttraumatic symptoms in different ways. These observations are rooted in what has been determined to be neurobiological changes in the developing brain in response to traumatic exposures,5 which in turn affect behavior and can alter an individual’s developmental trajectory. Such reactions in youth can extend further than what the DSM has historically considered to be within the domains of PTSD, and can include changes to emotional regulation, information processing, attachment, and peer relationships in what has been referred to as “complex traumatic stress reactions” or “developmental trauma disorder.”6,7 A challenge for the DSM has been how to incorporate age-specific considerations in its classification system. Specifiers for how symptoms might differ in children were introduced in the DSM-III-R and later expanded in the Fourth Edition (DSM-IV).8 The DSM-5 however, represents a significant step forward in the diagnosis of PTSD in children and adolescents because of its greater emphasis on developmental processes and behavioral sequelae of trauma. Age specifiers have remained a part of the criteria for PTSD for children aged seven years and older, but the DSM-5 has also introduced the first developmental subtype of an existing DSM disorder: posttraumatic stress disorder for children aged six years and younger.9

Exposure to trauma is not uncommon during childhood and adolescence, with samples demonstrating that close to 70 percent of youth surveyed had a lifetime exposure to one traumatic event, whereas nearly 40 percent had greater than one exposure.10 Within the general population, the preva-
The primary diagnostic criteria for PTSD is specifically stated as applicable to adults, adolescents, and children older than six, and there has been the addition of two subtypes: the PTSD preschool subtype for children aged six years and younger, and the PTSD dissociative subtype, which is characterized by persistent and recurrent symptoms of depersonalization and derealization. The differentiation between acute and chronic PTSD has been eliminated, with the only current requirement being that the disturbance continue for more than one month. As in the DSM-IV, there is a specifier for delayed expression that pertains to symptoms that meet full diagnostic criteria that are not present until six months after the event. In comparison to the DSM-IV which had 3 symptom clusters (B, C, and D) and 17 distinct symptoms, the DSM-5 now has 4 symptom clusters (B, C, D, and E) and a total of 20 symptoms.

Criteria A are now more explicit in describing what constitutes a traumatic event and how the event can be experienced. The total number of symptoms that characterize re-experience for criteria B has remained at 5, although criterion B3 has been loosened, with a less specific description of what constitutes a dissociative reaction. Criteria C from the DSM-IV have now been divided into separate clusters: avoidance (criteria C) and negative cognitions and mood (criteria D). The new criteria D retain many of the DSM-IV numbing symptoms, but also introduce new and reconceptualized symptoms, including persistent negative beliefs about one’s self and negative emotional states. Finally, criteria E describe the alterations in arousal and reactivity associated with trauma, as did the criteria D in the DSM-IV. A new symptom of reckless or self-destructive behavior has been added, which is of particular applicability to adolescent posttraumatic responses.

The preschool subtype of PTSD represents the first developmental subtype of an existing disorder in the DSM. Instead of four symptom clusters, there are three, which include re-experiencing (criteria B), avoidance and negative cognitions (criteria C), and arousal (criteria D). The criteria are also more anchored in the behavioral realm, rather than to symptoms based on verbal report or abstract cognition. For the stressor criteria, in addition to directly experiencing a traumatic event (A1), there is an emphasis on the impact that witnessing or learning of an event that affected a parent or caregiver can have on a young child (A2 and A3). The symptoms of re-experiencing in the B criteria are the same as for ages
above 6 years, with the addition of developmental specifiers for B1, B2, and B3. Unlike the new avoidance and negative cognition criteria for older ages, for the preschool subtype, these two symptom categories are again combined into one cluster (criteria C). Of note, for the subtype, only one symptom of avoidance or negative cognitions must be present for the diagnosis of PTSD, which stems from the significantly lower prevalence rates of these symptoms in younger children and the difficulty in detecting them. Also omitted are a sense of foreshortened future and inability to recall aspects of the trauma, which are not reflective of the cognitive abilities of young children. There are only four symptoms of negative cognition for preschoolers, which include an increased frequency of negative emotional states (C3), diminished interest or participation in activities, including a constriction of play (C4), socially withdrawn behavior (C5), and a persistent reduction in expression of positive emotions (C6). Criteria D in the preschool subtype include five symptoms, with the reckless and self-destructive behavior found in the adult criteria omitted. The expression of irritability and angry outbursts (D1) contains the additional specifier that this symptom can present as extreme temper tantrums.

The Posttraumatic Forensic Evaluation of Minors

Now that the DSM-5 has supplanted the DSM-IV, evaluators must appropriately understand and use the new criteria, both in diagnosing and ruling out the presence of PTSD. Studies that used prototypes of the DSM-5 criteria demonstrated significant increases in the rates of diagnosis.18–24 By using the DSM-5 criteria, it is expected for several reasons that both the true incidence and true prevalence of PTSD will now increase for preschoolers. With the removal of the DSM-IV criterion A2 and an expansion of what constitutes a stressor for this age group, more children will now meet the threshold for criteria A. Symptoms of criteria B and C will be easier to detect, given the greater emphasis on the behavioral sequelae of trauma, as opposed to the former criteria, which required more verbal report. These symptoms can be observed by the evaluator and reported by collateral sources. The requirement for criteria C that only one symptom of avoidance or negative cognitions be present also removes what has been an obstacle in the past to application of the diagnosis to younger children: namely, so few children exhibited multiple symptoms in the domain of avoidance that it was very difficult for this age group to meet the full criteria.

The picture is less clear how the new criteria will affect the prevalence in school-age children and adolescents. Removing the old criterion A2 may allow more school-age children to be detected by the new criteria A. The wording of criteria B has also been changed in a way that loosens the criteria (“distressing memories” versus the former “recollections of the event, including images, thoughts, or perceptions”). Likewise, for B2, content and affect in dreams are “related to the traumatic event(s), as opposed to “of the event.” The inclusion of “reckless or self-destructive behavior” has also opened up a new avenue of including externalizing behaviors in school-age children and adolescents that were not possible when using the previous criteria.

The continued inclusion of the delayed-onset specifier will also undoubtedly be of great importance in PTSD-based litigation going forward. This specifier displays an appreciation of the course of PTSD in youth (and adults), as well as the high distress and impairment that subthreshold symptoms can impart. However, one can imagine that the use of this specifier has the potential to introduce uncertainty into the court if a categorical paradigm for mental illness continues to be applied. It is important to see PTSD symptoms on a continuum and in a dimensional manner and not to expect them to be in an all-or-nothing category. If the evaluation and testimony fall within the six-month time frame in which full criteria are not met, how can the court be assured that a full syndrome will develop? In line with this question, will courts have a tendency to place a lesser value on the suffering and impairment during the period of delayed expression? In such cases, it is the responsibility of the expert to explain carefully the concept of dimensionality and research findings that pertain to subthreshold symptoms.

The Forensic Interview of Youth After Trauma

The forensic evaluation of children and adolescents after alleged trauma involves multiple means of assessment and sources of collateral information in addition to the primary interview. The expert should assess the reliability of the information obtained. Use of more sources of data and other objective measures of symptoms helps to ensure validity and reliability.
The forensic interview also must be tailored to the emotional and cognitive developmental stage of the youth.

The Parent Interview

In approaching pediatric forensic cases, information may first be obtained in an interview with parents and guardians. Relevant psychosocial, familial, medical, psychiatric, and developmental history should be reviewed. The focus of the interview should be on the child’s functioning before the stressor, and changes that have been observed following it. Questions about the quality of the child’s play, social interactions, and academic performance should be asked. In line with the DSM-5 changes, for adolescents and school-age children, it is recommended that the evaluator inquire as to the parents’ perception of the youth’s ability to express positive emotions; the presence of negative beliefs, cognitions, and emotions; and the tendency toward reckless and self-destructive behavior. The intent of reckless or self-destructive behavior must be understood to differentiate it from an act of impulsivity or rule-breaking behavior, such as may be seen in attention-deficit hyperactivity disorder (ADHD) or conduct disorder. For preschoolers, the behavioral manifestations of avoidance, traumatic re-enactment in play, and frequency of temper tantrums should be determined. In clinical settings, parents have a tendency to under-report PTSD symptoms, and although they are good reporters of externalizing behaviors, they may be poor reporters of internalizing symptoms in their children.

Although it is recommended that a parent or guardian interview be considered, there may be situations in which limitations or restrictions are imposed on this. One example is that the plaintiff may move to restrict access to caregivers when a forensic evaluator has been retained by defense. In such a case desired information may be obtained through review of records or through depositions, rather than from an interview with a parent or guardian.

The Child and Adolescent Interview

Children and adolescents may be reluctant to speak about their trauma for obvious reasons: difficulty describing what happened (particularly for younger children); feelings of embarrassment, shame, or guilt; and avoidance to prevent distress. In this context the forensic evaluator must tread carefully in the interview to avoid retraumatizing the child, but at the same time must establish the details of the child’s experience and perception of it. Clinicians may have the impulse to avoid asking direct questions about the trauma for fear of upsetting the child or adolescent. However, it is a necessary part of the clinical or forensic interview to engage with this subject directly, to gain adequate understanding of the child’s symptoms and response to the incident. This process can be made easier by devoting attention and effort to forming a rapport with the child and helping him feel at ease. The process includes expressing empathy and regret for the discomfort the child may have in discussing the incident, making efforts to minimize distress and fatigue during the interview, explaining the nature of the session, and leaving time at the end of the interview to explore the child’s impressions and thoughts about it. With both younger children and adolescents, generally open-ended questions should be asked first, followed by more specific questions.

With young children, the ability to participate in an interview will not only be influenced by their reluctance to speak about the event, but also by their developmental, cognitive, and language limitations. Establishing the child’s awareness of the difference between the truth and lies and imagination are important for gauging their reliability. What other individuals have said about the event and what other interviews have been conducted regarding it must be determined to search for any distortion of the child’s account that may have come from these sources. Although children as young as six or seven can provide some information about internalizing symptoms, they are not likely to give extensive information about the incident or their response to it on their own; they will need support from the evaluator. Providing such support can be challenging, but it allows the evaluator to use nonverbal interviewing strategies and behavioral observations in formulating the case. The child’s way of relating to the evaluator and the child’s affect, emotional regulation, and manner of play convey crucial information.

Use of play, drawing pictures, storytelling, and sandwork are techniques that can be employed in enhancing communication with younger children. Traumatic play tends to be repetitive and simple and lacks the elaboration and imagination seen with children who have not experienced trauma. It is also often not enjoyable and does not relieve...
anxiety. The child may act out the trauma, take the role of the aggressor, or incorporate undoing or denial into his retelling of the incident. Drawing may help the child give more detailed verbal reports by providing retrieval cues and a structure to the narrative. It also shifts the focus of the interview away from the interaction with the evaluator, reducing the social and emotional demands of the evaluation. Toys and dolls used in play have also been used as a means of enhancing a child’s report. They are more effectively employed with children older than five years, as younger children cannot cognitively appreciate that a doll or toy can be both a playingthing and a symbol that represents their bodies. Use of dolls is more appropriate for children between the ages of 5 and 10, and, when accompanied by direct questions, can help them report distressing events and provide anatomical information about the trauma.

There are some criticisms of these techniques. Very specific and direct questioning in young children may lead them to feel that they must respond and may increase the risk that they will not report accurate information. Repeatedly asking the same question can lead a child to change the answer. Asking leading questions is a common error that may not only invalidate testimony, but also may contaminate the child’s memory such that future interviewers cannot obtain an accurate report again. Use of drawing can be of help in attaining a description of events, but can also introduce errors into children’s accounts, as evaluators can inadvertently suggest inaccurate information during the interview. Toys that are not dolls can distract the child from recalling and reporting the details of trauma, as they are associated generally with play rather than specific events. The use of dolls remains an area of controversy in cases of sexual abuse, as arguments have been made that they can be suggestive and encourage fantasy.

Collateral Reports, Observation, and Psychological Testing

In addition to the parent interview, collateral reports can be gathered from other family members (grandparents and siblings), teachers, school counselors, child protective services, the child’s pediatrician, and past therapists or psychiatrists. Behavioral rating scales and symptoms checklists can be completed by these individuals, as well. Documents that should be reviewed include medical, psychiatric, and therapy records; police reports; and media accounts. Given the greater weight of behavioral manifestations of PTSD in the DSM-5 criteria, the child may be observed in several settings, including home and school. Medical records have been found to underestimate the severity or even the presence of psychiatric symptoms, a limitation that the forensic evaluator must be aware of when using primary care or hospital records.

Aside from updated assessment measures that incorporate DSM-5 criteria, psychological testing may be useful. One reason is that testing can be used either to compare current cognitive functioning with a previous baseline, or to establish a baseline for going forward. PTSD is known in youth to affect learning, memory, and attention. Testing can aid in assessing the validity of a child’s statements. Projective testing may provide additional information on the child’s reaction to the traumatic event that for one reason or another he may be unable to convey. Tests to assess emotional and personality functioning include the MMPI-Adolescent Version (MMPI-A) and Personality Inventory for Children (PIC). Projective tests used in children and adolescents are the Children’s Apperception Test (CAT) for ages 3 to 10 and the CAT-H for older children, and the Roberts Apperception Test (RATC). The Wechsler Intelligence Scale for Children, 4th Edition (WISC-IV), is commonly used to assess intellectual functioning, and the Woodcock Johnson Tests of Achievement, 3rd Edition, provides measures of math and language abilities, as well as visuospatial functioning. Memory can be tested with the Wide Range Assessment of Memory and Learning (WRAML) or the California Verbal Learning Test, Children’s Version (CVLT-C).

Screening for substance use may be administered for both adolescents and school-age children. Substance use may be less common in the school-age population, but is a finding that should not be missed. The CRAFFT is a six-question screening tool for substance use that has demonstrated validity in the adolescent population.

Accuracy of Testimony and Evaluation of Malingering

An area of potential scrutiny in any pediatric forensic case is the accuracy of a child’s testimony. Any testimony can be vulnerable to alteration, whether it is from adults or children, either through suggestibility or the passage of time. Despite this and the cognitive, language, and memory limitations that are
inherent in development, children have the ability to be reliable witnesses. It has been generally found that children perform as well as adults in recalling the core aspects of a memory, but they do less well on the peripheral details. In some cases it has been shown that younger children can outperform adolescents and adults in tests of memory. Preschool age children performed better than college students at remembering the name and hometown of an individual they met two days prior. Three- and six-year-old children also performed better than college students at remembering whether a rug or telephone was in a room days after they saw the room. Children have outperformed adults in remembering dialogue in a film that was not important to the plot.

When children make errors in their testimony, these are more likely to be a failure to report an event that happened, rather than falsely reporting one that did not. Before middle childhood, children lack the cognitive strategies to retrieve memories spontaneously and are reliant on prompts from adults, including questions and repeating features of the event. In the absence of this structure provided by adults, details often cannot be accessed. This portal is also an entry for the contamination of the memory, as repeated questions can compel a child to alter the response. This concern is at the heart of scrutinizing children’s testimony: their degree of suggestibility. There are unfortunately multiple examples of cases where suggestibility has led to false accusations of sexual abuse or trauma. Age has been found to be the single best predictor of suggestibility, with younger children consistently found to be more suggestible than older children or adults. Older children can be suggestible as well, in some cases being even more suggestible because of their more developed cognitive capabilities. Fatigue and stress can also increase suggestibility.

The primary means by which children’s accounts have been altered is through an evaluator’s use of leading questions, which make a presumption that certain events occurred (“That’s when he touched you in your private parts, right?”), and end up misleading the child. Interviewer bias plays a key role in suggestibility as well and can be expressed through positive and negative reinforcement, creating a negative or accusatory emotional tone in the evaluation, repeating questions until a desired answer is given, and use of peer or parental pressure in the interview. Parents who are overly anxious or have historical traits may over-react to an innocent statement that a child made, which can lead to inaccurate recollections and false accusations. Children can also unintentionally distort reality to avoid a feared punishment, to avoid embarrassment, to gain attention or sympathy, or even to be vindictive. In addition, children and adolescents may deny that a trauma happened to protect an abuser, or to avoid feelings of embarrassment or guilt.

Misleading information can be incorporated into children’s accounts after a single suggestive interview. It is a necessity that the evaluator conduct the interview in a way that will guard against tainting the child’s recollection, by using open-ended questions and avoiding repeating questions. Leading questions should be avoided at all costs, as should clues or prompts for how to answer a question. Great effort should be made to maintain a neutral emotional tone during the evaluation. In addition, the child should be allowed to describe the trauma in his own words. Finally, a structured interview protocol has been created by the National Institute of Child Health and Human Development (NICHD) for forensic evaluators that is specifically designed to reduce suggestibility for children younger than 14.

Although there is a very real danger of inadvertently altering the recall of a suggestible child, evidence has been found that children can be resistant to making false accusations, even after leading questions have been posed intentionally. In studies in which children had undergone routine medical procedures and leading questions were asked, children were not likely to make false reports of abuse, even after a year. Four-year-old children were also found to be resistant to alleging abuse, even when prompted by an evaluator to do so.

There is a need in every evaluation carefully to rule out malingering. Research has suggested that children and adolescents can engage in deception during the evaluation process. The potential for malingering is influenced by a youth’s developmental stage, with evidence that lying is more common with increasing age. Although children as young as 3 years are capable of deception, in this age group, it may not be intentional and tends to be denial of wrong-doing. Children in the range of age five to six years are able to tell some rudimentary lies, but have difficulty in sustaining the deception. Intentional deception with the goal of instilling a false belief in others begins to develop at six to seven years of age, whereas more
sophisticated lies and malingering of psychological symptoms may be possible by around age 12. Motivations for deception also change as a child ages. Young children may be primarily motivated by the avoidance of discomfort or punishment. Older children or adolescents may be motivated by a desire for medication, removal from school, compensation associated with child abuse or custody cases, attempts to be placed with a desired parent, or lenience in a criminal justice setting.

Malingering requires the ability to role play, engage in impression management, control one’s facial expressions, and sustain deceit, a skill set that is in the domain of an adolescent’s abilities, though there are studies that have suggested that youth in late childhood are also capable of malingering. It is largely a fear that psychiatric symptoms could be faked that has historically kept damages for psychological trauma below those for physical trauma. Malingered PTSD in youth may occur in the context of a caretaker’s encouragement to fabricate a traumatic experience for financial compensation, or in cases of custody disputes to gain an advantage for a petition. Symptoms that raise suspicion of malingering include those that are exaggerated or have attracted attention. The symptoms may not fit any particular diagnostic category. Often there will be inconsistency between the reported loss of function and what the child is actually able to do. This is the additional value of observing the child in numerous settings. For example, claims may be made that the child is unable to function in school, but he will continue to participate in sports and other activities without difficulty. Additional presentations that are suggestive of malingering include an eagerness to discuss past trauma, an attitude of entitlement, low observed anxiety, depression in the context of high reported symptoms in these domains, and unrealistic claims of what constituted a trauma. In testing the hypothesis that a child or adolescent may be malingering, Lubit et al. suggested techniques such as asking about symptoms that do not apply to PTSD, mentioning an atypical symptom in earshot to see whether it is reported by the patient, and making a loud noise to gauge the startle response. Caution must be used in pursuing a diagnosis of malingering, in particular with regard to dismissing developmentally appropriate difficulties a child may have with sequences of events, details of an incident, or differentiating between episodes of a repeated event as attempts to fabricate information.

There is evidence that children and adolescents can malinger on neuropsychological testing, which is relevant to cases of alleged PTSD, as impairments in information processing, cognition, and attention are potential sequelae of traumatic exposure. In one case study, a boy who was nine years old in litigation related to an alleged head injury after he was struck by a car was found to be feigning cognitive symptoms on neuropsychological testing. A separate study illustrated that brain damage feigned by adolescents on neuropsychological testing was not detected by any of the neuropsychologists who reviewed the evaluations.

Conclusion

Is the ultimate goal of the forensic evaluation of trauma in children and adolescents to diagnose PTSD? Or more to the point, is it the “desired” diagnosis that will hold the most sway in court? Making a diagnosis of PTSD requires not only that exposure and symptoms that fall into the domains of criteria A, B, C, and D be present, but also that symptoms induce significant distress, impair relationships, or cause unacceptable school behavior (criteria F for the preschool subtype). However, studies have illustrated that children and adolescents with subthreshold posttraumatic symptoms do not significantly differ in their levels of distress and impairment from youth who meet full criteria for PTSD. With this concept in mind, it has been asserted that the greater purpose of the forensic evaluator is to evaluate, define, and determine the extent of psychological damage and suffering that the patient is experiencing from posttraumatic symptoms, rather than viewing injury solely through the lens of a diagnosis of PTSD.

Now that the incidence and prevalence rates of PTSD in the pediatric population are likely to rise with the changes to the DSM-5, how will this affect the role of the diagnosis in litigation and court proceedings? One scenario is that the higher sensitivity of the DSM-5 criteria may contribute to an increase in PTSD-based litigation and an even greater reliance on making a diagnosis of PTSD. Should this occur, it is important to keep in mind that the role of the forensic evaluator in cases of trauma has two parts: to make an accurate diagnosis based on the presence of posttraumatic symptoms, while also de-
terminating what the youth’s areas of impairment are secondary to those symptoms. PTSD is only one of many disorders that can develop after an exposure to a stressor, and in fact, comorbidity appears to be the rule rather than the exception. To present a full picture of the sequelae of a traumatic event, the evaluator must perform a detailed examination and obtain and convey an understanding of the disorders and emotional problems that can present as comorbidities with or alternatively to PTSD in traumatized children. Although the DSM-5 criteria will continue to be relied upon in diagnosing PTSD in children and adolescents, it is the responsibility of informed experts to examine and incorporate into their reports and testimony those symptoms, behavioral changes, and aberrations of normal development that are present and go beyond the DSM criteria, but are no less clinically important.

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