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Practice Parameters for the Assessment and Treatment of Children and Adolescents With Posttraumatic Stress Disorder

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ABSTRACT

These practice parameters review the current state of knowledge about post-traumatic stress disorder (PTSD) in children and adolescents. The parameters were written to aid clinicians in the assessment and treatment of children and adolescents with PTSD symptoms. A literature search and extensive review were conducted in order to evaluate the existing empirical and clinical information in this regard. Expert consultation was also solicited. The main findings of this process were that a wide variety of stressors can lead to the development of PTSD symptoms in this population; the specific PTSD symptoms manifested may vary according to the developmental stage of the child and the nature of the stressor, and for this reason, the diagnostic criteria for PTSD in adults may not adequately describe this disorder in children and adolescents; that several factors appear to mediate the development of childhood PTSD following a severe stressor; and that most of the therapeutic interventions recommended for children with PTSD are trauma-focused and include some degree of direct discussion of the trauma. Controversies and unresolved issues regarding PTSD in children are also addressed. **Key Words:** posttraumatic stress disorder, trauma, trauma-focused therapy, children, adolescents, evaluation, treatment, practice parameters, guidelines.

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

Since the introduction of posttraumatic stress disorder (PTSD) as a diagnostic category in *DSM-III* (American Psychiatric Association, 1980), there has been a growing awareness that children and adolescents as well as adults can experience this disorder. Because it is a relatively new diagnosis, because the diagnostic criteria have changed with each DSM revision since 1980, and particularly because developmental factors may significantly impact on the clinical presentation of this disorder, practice parameters can be of value in assisting clinicians in the diagnosis and treatment of childhood PTSD, and as a result, also be of value to the children and families of children who develop this disorder.

These parameters are applicable to the evaluation of children and adolescents and presumes familiarity with normal child development and the principles of child psychiatric diagnosis and treatment (American Academy of Child and Adolescent Psychiatry, 1997). In these parameters, the terms “child” and “children” refer to both children and adolescents unless otherwise noted. The term “parent” refers to the child’s primary caretaker, even if not a biological parent.

LITERATURE REVIEW

The list of references for these parameters was developed by searches of *Medline* and *Psychological Abstracts*, reviewing the bibliographies of book chapters and review articles, and soliciting source materials from colleagues with expertise in PTSD in children. The searches of *Medline* and *Psychological Abstracts* were conducted in February 1997 using the text terms: posttraumatic stress disorder, children, and adolescents. The search covered the period 1992 through January 1997 and yielded approximately 170 articles and chapters. References from the articles and chapters then were reviewed. Twelve full-length books also were reviewed. A search of the National Center on PTSD PILOTS database was conducted in July 1997. In addition, two authors, L.C. Terr and R.S. Pynoos, were researched due to their expertise in this area. Only the most relevant resources were included in this document.

PTSD refers to the development of characteristic symptoms following exposure to a particularly severe stressor. The diagnostic criteria for this disorder have undergone revisions from those originally proposed in *DSM-III* (American Psychiatric Association, 1980). For the purposes of these parameters, the *DSM-IV* (American Psychiatric Association, 1994) criteria and definitions are used unless otherwise noted.

The definition of “traumatic stressor” in *DSM-IV* does not require that the event be outside the realm of normal human experience as suggested by *DSM-III*. This revision occurred in response to recognition that some stressors known to result in PTSD symptoms are not rare (such as rape, child abuse, and exposure to domestic violence, community violence, or conditions of war). The stressor must, however, be “extreme,” i.e., it must involve either experiencing or witnessing an event capable of causing death, injury, or threat to physical integrity to oneself or another person; or learning about a significant other being exposed to such an event. This exposure constitutes the first criterion for PTSD. The child’s reaction must include intense fear, horror, helplessness, or disorganized or agitated behavior. *DSM-IV* includes a partial list of several events that may fit the definition of an extreme traumatic stressor, but gives the clinician latitude in making this determination depending on the specifics of the situation.

To meet criteria for PTSD, the child’s response must include a specific number of symptoms from each of three broad categories: reexperiencing, avoidance/numbing, and

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

increased arousal. There have been revisions in *DSM-III-R* and *DSM-IV* regarding the specific symptoms included under each of these categories, with progressively more attention given in each revision to alternative ways in which children may manifest these symptoms. There also have been changes and ongoing debate on whether the required number of symptoms in each category is appropriate for children (Benedek, 1985; Green, 1991; Green et al., 1991). The current requirements are that the child must exhibit at least one reexperiencing symptom, three avoidance/numbing symptoms, and two increased arousal symptoms to receive a *DSM-IV* PTSD diagnosis. These requirements are based on current diagnostic criteria for adult PTSD, which may require amendment for younger children.

Reexperiencing symptoms include recurrent and intrusive distressing memories of the event, which in young children may be manifested by repetitive play with traumatic themes; recurrent distressing dreams about the trauma or frightening dreams without recognizable content; acting or feeling as if the trauma were recurring, including trauma-specific reenactment (for example, reenacting sexual acts the child experienced during sexual abuse); intense distress at exposure to cues that symbolize or resemble an aspect of the trauma; and physiological reactivity at exposure to such cues.

Avoidance of stimuli associated with the event and numbing of general responsiveness must not have been present prior to the trauma, and may be manifested by efforts to avoid thoughts, feelings, or conversations associated with the trauma; efforts to avoid reminders of the trauma; amnesia for an important aspect of the trauma; diminished interest or participation in normal activities; feeling detached or estranged from others; restricted affective range; and a sense of a foreshortened future (e.g., believing one will not live a normal life span).

Persistent symptoms of increased arousal must be newly occurring since the trauma and include sleep difficulties, irritability or angry outbursts; difficulty concentrating; hyper vigilance; and exaggerated startle response. These symptoms must be present for at least 1 month and must cause clinically significant distress or impairment in functioning.

Brief History

Although PTSD was not recognized formally as a mental disorder until 1980, it was described under various other names for at least a century. A fascinating chapter by Herman (1992) reviews the striking pattern of public recognition followed by repudiation that has characterized this condition. Several prominent neurologists/psychiatrists described the symptoms characteristic of PTSD (then called conversion or hysterical neurosis) in the nineteenth century. Freud linked these symptoms in women to histories of sexual exploitation in childhood, although he eventually became convinced that this experience was not as prevalent as evidenced by disclosures of the symptomatic patients he saw.

PTSD next entered public awareness as a result of World War I. During this conflict, many soldiers developed "shell shock," so named because these PTSD-like symptoms were initially attributed to neurological damage secondary to exploding ammunition shells. Eventually it became clear that the disorder originated from psychological rather than physiological trauma, and was renamed "combat neurosis." After the end of World War I, professional and public interest in traumatic stress again

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

waned, to resurface only during World War II. Kardiner (1941) and Kardiner and Spiegel (1947) described the clinical manifestations of “traumatic neurosis” and suggested the importance of consciously reliving and resolving the traumatic memories in therapy in order to recover. Freud and Burlingham (1943) recognized that traumatic stress symptoms also could occur in children exposed to conditions of war.

The most recent public and professional recognition of PTSD occurred as a result of advocacy by Vietnam War veterans and feminists in the 1960s (Herman, 1992). Significant numbers of Vietnam veterans developed PTSD symptoms (Figley, 1978) and activists in antiwar veterans groups demanded greater attention to the psychological damage caused by the war. This resulted in the first large scale empirical studies of PTSD commissioned by the Veterans Administration (Egendorf et al., 1981). At the same time, grassroots feminist groups opened rape crisis centers in recognition of the many women experiencing “rape trauma syndrome” as a result of childhood sexual abuse, rape, and domestic violence. Empirical studies were conducted to document the frequency of these experiences in the general population (Russell, 1983) as well as the PTSD-type symptoms frequently occurring in response to these experiences (Frank et al., 1980; Kilpatrick et al., 1985).

In response to growing recognition of the traumatic etiology of these symptoms, PTSD was formally recognized as a psychiatric diagnosis in *DSM-III* (American Psychiatric Association, 1980). However, even when PTSD was acknowledged as a valid adult psychiatric disorder, there was initial skepticism that children could also suffer from it. The initial adult response to the impact of trauma on children is often denial (Handford et al., 1986; Malmquist, 1986; Rigamer, 1986; Sack et al., 1986). Parents and teachers may minimize traumatic impact in their desire to reassure themselves that children are not “damaged” or to relieve vicarious distress over the child’s experience. Adults, including mental health professionals, also have rationalized that children are too young to remember traumatic events, or too developmentally immature to be traumatized (Benedek, 1985). Children themselves may contribute to this misperception, often trying to protect their parents from knowing how badly the trauma has affected them (Yule and Williams, 1990).

Coinciding with the introduction of PTSD in *DSM-III*, several studies of children traumatized by various catastrophic situations began to appear. Terr (1979; 1983) published a landmark study of children traumatized by the kidnapping and underground burial of their school bus. Newman (1976) and Green et al. (1991) described PTSD symptoms in children experiencing the 1972 Buffalo Creek dam collapse, and Pynoos et al. (1987) documented PTSD in children exposed to a sniper attack in their school yard. The 1980s also witnessed a marked increase in empirical studies regarding PTSD and other psychological difficulties experienced by sexually abused children (Conte and Schuerman, 1987; Friedrich et al., 1986; Goodwin, 1988; Mannarino et al., 1989). As the clinical descriptive and empirical literature expanded, it became clear that PTSD as defined by *DSM-III* did not adequately describe childhood variants of that disorder (Garmezy, 1986). Clinical experts in childhood PTSD contributed to the preparation of *DSM-III-R* (American Psychiatric Association, 1987), resulting in the addition of several notes to the criteria for variations in symptom presentation in children. In *DSM-IV*, the PTSD criteria reflect ongoing revisions based on increased understanding of the varied

clinical manifestations of PTSD in children. It is anticipated that these criteria will be refined further to more accurately reflect developmental variations.

EPIDEMIOLOGY

The evolution of diagnostic criteria for PTSD has complicated the task of determining the prevalence of PTSD. Community-based studies have revealed a lifetime prevalence of 1% to 14% (American Psychiatric Association, 1994). However, it is probably less meaningful to examine PTSD prevalence in the general population than in a cohort exposed to traumatic events. Studies of at-risk child populations have yielded PTSD prevalence rates varying from 3% (Garrison et al., 1995) to 100% (Frederick, 1985), depending on the methods used to assess PTSD, the population sampled, and the nature of and time passed since the traumatic event. Two community studies indicate that PTSD may be a fairly prevalent disorder among children and teens exposed to traumatic events. One random sample of non-referred urban youth exposed to community violence revealed that 34.5% met full criteria for PTSD (Berman et al., 1996); another study of a similar cohort demonstrated that 24% met PTSD criteria (Breslau et al., 1991).

Although some researchers have documented gender differences in the development of PTSD symptoms following exposure to a traumatic event (Berton and Stabb, 1996; Brent et al., 1995; Garbarino and Kostelny, 1996; Green et al., 1991; Shannon et al., 1994; Shaw et al., 1996), others have not (Berman et al., 1996; Burton et al., 1994; Nader et al., 1990; Pynoos et al., 1987; Sack et al., 1995; Shaw et al., 1995). Some studies have indicated that girls develop more severe and long-lasting PTSD symptoms when exposed to traumatic events, but that boys are more likely to be exposed to such events (Helzer et al., 1987). While some studies have found that the age of the child at the time of exposure significantly mediates development of PTSD symptoms (Davidson and Smith, 1990; Hoffman and Bizman, 1996), these findings have not been consistent (Garrison et al., 1995; Green et al., 1991) and may reflect developmental differences in the clinical manifestation of PTSD rather than age-mediated differences in prevalence. Studies of PTSD in adults have indicated the possibility of a genetic predisposition for developing PTSD (True et al., 1993); no studies have examined this theory in children.

Numerous studies have evaluated children of diverse ethnic backgrounds, and have documented that PTSD occurs across cultural and ethnic groups, although cultural factors may affect how PTSD is manifested (Ahmad and Mohamad, 1996; Diehl et al., 1994; DiNocola, 1996; Jenkins and Bell, 1994; Manson et al., 1996). For example, children of Latin American descent may manifest PTSD symptoms as *susto*, which is described as a culture bound syndrome in *DSM-IV* (American Psychiatric Association, 1994).

Numerous studies have examined mediating factors regarding the development of PTSD in children. Most authors acknowledge that, while every person will experience psychological distress if the stressor is severe enough, the development of PTSD is multifactorial (Berliner, in press; Yehuda and McFarlane, 1995). A review of 25 studies indicates that three factors have been found to consistently mediate the development of PTSD in children: the severity of the trauma exposure, parental trauma-related distress, and temporal proximity to the traumatic event (Foy et al., 1996). However, these authors

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

conclude that additional research is needed to confirm these findings and to identify other possible mediating factors.

Studies documenting a positive relationship between self-reported exposure and children's PTSD symptoms include studies of exposure to community violence (Berton and Stabb, 1996; Boney-McCoy and Finkelhor, 1996; Breslau et al., 1991; Burton et al., 1994), peer suicide (Brent et al., 1995), natural disasters (Goenjian et al., 1995; LaGreca et al., 1996; Lonigan et al., 1994; Newman, 1976; Vernberg et al., 1996), war (Macksoud and Aber, 1996; Realmuto et al., 1992), man-made disasters (March et al., 1997; Milgram et al., 1988; Nader et al., 1990; Pynoos et al., 1987), and sexual abuse (Mannarino et al., 1991; Wolfe et al., 1994). Other studies have found that the severity of exposure does not mediate symptom formation (Earls et al., 1988) or that the impact is variable (Finkelhor, 1990). Rutter (1987) postulated that the accumulation of multiple stressors in children dramatically increases the risk of permanent developmental damage and the emergence of PTSD symptoms.

Several studies have documented the impact of familial support and parental emotional reaction to the trauma on the child's PTSD symptoms. These include studies of natural disasters (Bloch et al., 1956; Green et al., 1991; LaGreca et al., 1996; McFarland, 1987), community violence (Breslau et al., 1991; Burton et al., 1994; Wyman et al., 1992); parental homicide (Burman and Allen-Meares, 1994), physical abuse (Anthony, 1986; Kolko, 1996), sexual abuse (Cohen and Mannarino, 1996c), serious medical illness such as cancer and severe burns (Armstrong et al., 1994; Butler et al., 1996; Koocher and O'Malley, 1981; Meyer et al., 1994; Nir, 1985; Rizzone et al., 1994; Stoddard, 1996; Stuber et al., 1991), and war (Freud and Burlingham, 1943; Garbarino and Kostelny, 1996; Kinzie et al., 1986; Laor et al., 1997; Sack et al., 1995). In all of these studies, familial support mitigated the development of PTSD in children, or parental distress about the trauma and/or the presence of parental psychiatric disorders predicted higher levels of PTSD in the child. In contrast, Parker et al. (1995) found no relationship between child and parent PTSD symptoms after a roof blew off of an elementary school building and killed one of the students. Lyons (1987) postulated that the single best predictor of positive outcome for children surviving a traumatic event is the ability of parents and other significant adults to cope with the trauma.

Although most studies indicate that some children spontaneously recover from PTSD over time, there is evidence that PTSD symptoms can persist for many years.

CLINICAL PRESENTATION

PTSD can present with a wide variety of clinical features. Developmental factors clearly play a strong role in these variations (Amaya-Jackson and March, 1995; Pynoos et al., 1995).

In general, as children mature, they are more likely to exhibit adult-like PTSD symptoms. Thus, adolescents with PTSD may meet strict *DSM-IV* criteria with re-experiencing symptoms such as intrusive thoughts and nightmares; avoidance of discussion of the traumatic event and places or people psychologically associated with the event; amnesia for an important aspect of the trauma; withdrawal from friends or usual activities; detachment from others and sense of foreshortened future; and hyper arousal, such as sleep difficulties, hyper vigilance, and increased startle response.

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

Adolescents with chronic PTSD who have experienced prolonged or repeated stressors may present with predominantly dissociative features, including derealization, depersonalization, self-injurious behavior, substance abuse, and intermittent angry or aggressive outbursts (Goodwin, 1988; Hornstein, 1996; Terr, 1991).

Clinical reports have suggested that some elementary school-aged children may not experience amnesia for aspects of the trauma, and with acute PTSD may not have avoidant or numbing symptoms (Terr, 1985). They also may or may not have visual flashbacks (Terr, 1985). Children in this developmental stage may show frequent posttraumatic reenactment of the trauma in play, drawings, or verbalizations. They also may have a skewed sense of time during the traumatic event. Sleep disturbances may be especially common in prepubertal children (Benedek, 1985). Terr (1983) also has described a high prevalence of “omen formation” in these children, i.e., they come to believe that certain “signs” were warnings of the traumatic event approaching and that if they are alert enough, they will be able to see “omens” predicting future disasters. Due to the general inability of younger children to have a future time perspective, questions about foreshortened future may be meaningless in this age group.

Very young traumatized children may present with relatively few *DSM-IV* PTSD symptoms. In part this may be because, as Scheeringa et al. (1995) point out, eight out of 18 *DSM-IV* criteria “require verbal descriptions from patients of their experiences and internal states....limited cognitive and expressive language skills [in young children] make inferring their thoughts and feelings difficult” (p. 191). Infants, toddlers, and preschoolers therefore may present with generalized anxiety symptoms (separation fears, stranger anxiety, fears of monsters or animals), avoidance of situations that may or may not have an obvious link to the original trauma, sleep disturbances, and preoccupation with certain words or symbols that may or may not have an apparent connection to the traumatic event, rather than more typical *DSM-IV* manifestation (Drell et al., 1993). Scheeringa et al. (1995) have proposed an alternative checklist to *DSM-IV* criteria for detecting PTSD in young children. These authors differentiate between posttraumatic play (which is compulsively repetitive, represents part of the trauma, and fails to relieve anxiety) and play reenactment (which also represents part of the trauma, but is less repetitive and more like the child’s pre-trauma play). Either of these may fulfill the reexperiencing criteria, as can non-play recollections of the trauma (which are not necessarily distressing) or nightmares. Scheeringa et al. (1995) also suggest that in the avoidance/numbing category, only one of the following be required: constriction of play (with or without posttraumatic play), social withdrawal, restricted range of affect, or loss of acquired developmental skills. These authors further suggest that only one symptom of increased arousal be required to diagnose PTSD in very young children, but suggest requiring at least one item from an added category, new fears and/or aggression. Thus, there is no clear consensus regarding the “typical” clinical presentation of PTSD in very young children. Almquist and Brandell-Forsberg (1997) demonstrated that formal and objective assessment of play content aided in the diagnosis of PTSD in preschoolers. This area of investigation may benefit future attempts to standardize the assessment of PTSD in this age group.

Physiologic Findings

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

Although several authors have postulated a variety of neurophysiological changes that may explain the development and maintenance of PTSD in children (Charney et al., 1993; Perry, 1994), very few studies have empirically evaluated these theories. DeBellis and colleagues (1994a, 1994b) reported changes in the hypothalamic-pituitary-adrenal axis and catecholamine excretion of severely sexually abused girls; the changes were similar to those seen in Vietnam veterans with PTSD and in some adults with major depressive disorder (MDD). However, only one of these girls had a diagnosis of PTSD, leading the authors to hypothesize that the findings may have been due to the effects of severe stress rather than being specific to sexual abuse or PTSD. Ornitz and Pynoos (1989) demonstrated that children with PTSD had a marked loss in the normal inhibitory modulation of the startle response, suggesting a possible long-term change in brain stem function in these children. Brent et al. (1995) and Stoddard et al. (1989) have noted the significant overlap between PTSD and MDD symptoms, suggesting the possibility of similar underlying psychophysiologic mechanisms in the two disorders. New research findings in adults have demonstrated that there may be two distinct neurobiological subgroups of PTSD patients, one with dysregulation of the noradrenergic system and the other with dysregulation of the serotonergic system (Southwick et al., 1997). This hypothesis has not been empirically evaluated in children.

Natural Course

There have been no well controlled studies examining the natural course of PTSD in children. Several authors and researchers have addressed the question of symptom persistence versus spontaneous remission, but none have adequately controlled for the impact of treatment, other intervening stressors, or other factors as opposed to the mere passage of time. Several investigators have performed longitudinal evaluations of PTSD symptoms in children. For example, Famularo et al. (1996) found that while 40% of severely maltreated children met full PTSD criteria soon after being removed from their parents' care, this percentage decreased to 33% 2 years later. Green et al. (1991) documented that 2 years after the Buffalo Creek dam collapse, 37% of the children evaluated met "probable" *DSM-III-R* PTSD criteria. A follow-up study (Green et al., 1994) indicated that 7% of those re-evaluated 17 years later continued to meet full PTSD criteria. LaGreca et al. (1996) evaluated children 3 months, 7 months, and 10 months after exposure to Hurricane Andrew and found at least moderate PTSD symptoms in 86%, 76%, and 69% of these children respectively. Shaw et al. (1995) found no differences in severity of PTSD symptomatology between 8 weeks and 32 weeks following exposure to Hurricane Andrew. Laor et al. (1997) found a significant decrease of PTSD symptoms in children displaced from their homes during SCUD missile attacks, from 6 months to 30 months post-exposure. McFarland (1987) studied children exposed to Australian bush fires, and found no decrease in PTSD symptoms from 8 months to 26 months after the fires. Milgram et al. (1988) evaluated children after a school bus disaster and found that 50% of the children at the accident scene met full PTSD criteria 1 month later but only 20% continued to meet criteria 9 months later. Pynoos et al. (1987) found that 50% of children exposed to a fatal school ground sniper attack had PTSD 1 month later. Although the entire cohort was not reevaluated, a follow-up study by Nader et al. (1990) indicated that 74% of the highly exposed children continued to have high rates of PTSD 14 months later.

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

Several other authors have evaluated PTSD in children long after exposure to a traumatic event to examine the persistence of these symptoms. Green (1985) found that 50% of physically abused children had persistent PTSD symptoms, which he attributed to his findings that “the anticipation of the trauma (reoccurring) might be as traumatic as the original event” (p. 145). Stoddard et al. (1989) found that 27% of severely burned children had persistent PTSD symptoms on readmission to the hospital for reconstructive surgery several years after the burns occurred. McLeer et al. (1992) found that 44% of referred sexually abused children met full *DSM-III-R* PTSD criteria, and found no relationship between the presence of this diagnosis and the length of time since the most recent abusive episode. Hubbard et al. (1995) found that 15 years after exposure to Pol Pot forced labor camps in Cambodia, 24% of youth aged 17 to 24 years met criteria for PTSD. In a study of a similar cohort, Kinzie et al. (1986) found that 50% of Cambodian adolescents exposed to these conditions met PTSD criteria 4 years post-exposure. Macksoud and Aber (1996) also found that 43% of Lebanese children exposed to war conditions met PTSD criteria, although the identified traumatic event had occurred up to 10 years previously. Schwarz and Kowalski (1991b) found that 27% of children exposed to a fatal school shooting met *DSM-III-R* PTSD criteria when assessed 8 to 14 months after exposure. Terr (1983) also documented the persistence of PTSD symptoms in children 4 years after their school bus was kidnapped. Boyle et al. (1995) followed 200 (50%) of the child survivors of the sunken ship *Jupiter*. While 50% developed PTSD soon after exposure, there was a gradual decrease in numbers of children experiencing PTSD symptoms over time. At 5 to 7 years post-exposure, 15% continued to meet PTSD diagnostic criteria. Taken together, these studies can be interpreted to indicate that while PTSD symptoms spontaneously remit in a proportion of children, they persist for long periods of time in a substantial proportion of children exposed to traumatic stressors. Research has not consistently demonstrated protective or risk factors in this regard. LaGreca et al. (1996) summarize current knowledge in this regard by stating “the course of PTSD symptoms in children over time and their associated outcomes are not yet known” (p. 722).

Clinically Relevant Subtypes

DSM-IV specifies three subtypes of PTSD. In the acute type, the duration of symptoms is less than 3 months. In the chronic type, the symptoms have lasted for 3 months or longer. In the delayed onset type, at least 6 months have passed between the traumatic event and the onset of symptoms. Due to the difficulty in eliciting some PTSD symptoms from children, and the tendency of some parents to minimize PTSD symptomatology in their children (which may contribute to a delay in having the child evaluated), a careful history should be taken before using the delayed onset specified in children. It also should be noted that if PTSD symptoms have appeared within 1 month after exposure to an extreme traumatic stressor but have not lasted beyond 1 month, a diagnosis of Acute Stress Disorder (ASD) should be made. If symptoms then extend beyond 1 month, the diagnosis should be changed to PTSD.

Terr (1991) has conceptualized a different framework of PTSD subtypes, determined by the type of trauma experienced. She suggested that Type I traumas (“one sudden blow” trauma, such as a motor vehicle accident or sniper attack) result in the classic DSM symptoms of reexperiencing, avoidance, and increased arousal, whereas

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

children experiencing Type II traumas (variable, multiple, longstanding traumas such as ongoing child physical or sexual abuse) result in denial, numbing, dissociation, and rage. Famularo et al. (1996) also described distinct symptomatology between acute and chronic types of PTSD, with the acute subtype having a predominance of sleep difficulties, physiologic hyper arousal, and reexperiencing, and the chronic subtype having dissociation, restricted affect, sadness, and detachment as more prominent symptoms. Spiegel (1984) discussed the prevalence of dissociative symptoms in children with PTSD who had experienced specific types of trauma. Although these differences have not been consistently empirically documented, clinicians should be aware that subtypes of PTSD may present with very different clinical features. Finally, it should be noted that although the *International Classification of Diseases*, Tenth Revision (ICD-10) includes the same three subtypes of PTSD as *DSM-IV*, it takes a different stance on some of the symptom requirements and thus there is imperfect overlap in diagnostic criteria for PTSD between the two classification systems.

Comorbidity

Several studies have documented significant comorbidity of childhood PTSD with other psychiatric disorders. Brent et al. (1995) noted that there is a large overlap in symptom criteria between PTSD and MDD, and went on to suggest that the “core features” of PTSD may be much narrower than the *DSM-IV* criteria suggest. That study as well as others (Goenjian et al., 1995; Green, 1985; Hubbard et al., 1995; Kinzie et al., 1986; Kiser et al., 1991; Loeff et al., 1995; Singer et al., 1995; Stoddard et al., 1989; Weine et al., 1995; Yehuda and McFarlane, 1995; Yule and Udwin, 1991) have noted comorbidity between PTSD and depressive disorders (MDD and dysthymic disorder). Several authors have hypothesized that PTSD precedes and predisposes to the onset of MDD (Goenjian et al., 1995; Yehuda and McFarlane, 1995) rather than the reverse. Several investigators have documented comorbidity between PTSD and substance abuse in children (Arroyo and Eth, 1985; Brent et al., 1995; Clark et al., 1995; Loeff et al., 1995; Sullivan and Evans, 1994). Comorbidity between PTSD and other anxiety disorders (*DSM-III-R* overanxious disorder, agoraphobia, separation anxiety disorder, and generalized anxiety disorder) has also been described (Brent et al., 1995; Clark et al., 1995; Goenjian et al., 1995; Kiser et al., 1991; Lonigan et al., 1994; Singer et al., 1995; Yule and Udwin, 1991).

The theoretical relationship between PTSD and externalizing behavioral disorders may seem obscure. However, authors such as Malmquist (1986) have noted that numbing or avoidance may take many forms in children, including restlessness, hyper alertness, poor concentration, and behavioral problems. Anxiety in young children may be manifested by hyperactivity, distractibility, and impulsivity, which are hallmarks of attention-deficit/hyperactivity disorder (ADHD). This may explain why comorbidity has also been found between PTSD and ADHD (Cuffe et al., 1994; Glod and Teicher, 1996), and why traumatized children may present with ADHD symptoms rather than PTSD (DeBellis et al., 1994a; Loeff et al., 1995; McLeer et al., 1994). It also may explain why PTSD is sometimes misdiagnosed as ADHD in younger children. Conversely, it is possible that children with preexisting ADHD may be more vulnerable to developing PTSD following a traumatic experience. High prevalence of other externalizing disorders, such as conduct disorder and oppositional-defiant disorder, have also been noted in

children with PTSD (Arroyo and Eth, 1985; Green, 1985; Steiner et al., 1997; Stoddard et al., 1989). Steiner et al. (1997) suggest that PTSD may result in loss of impulse control and diminished control of aggression and anger, which may explain this comorbidity. Pelcovitz et al. (1994) hypothesize that externalizing symptoms may be an initial response to ongoing stressors such as physical abuse, and that there may be a “sleeper” effect in the emergence of PTSD symptoms.

Finally, although not empirically documented, there may be comorbidity between PTSD and borderline personality disorder (BPD), particularly in sexually abused adolescents. Studies have indicated that 60% to 80% of females diagnosed as having BPD report a history of childhood sexual abuse (Herman et al., 1989; Stone, 1990). Goodwin (1985) and Herman and van der Kolk (1987) have suggested that BPD may represent a very severe and chronic manifestation of PTSD. Other authors have indicated the predominance of dissociative and interpersonal problems associated with chronic PTSD (Famularo et al., 1996; Spiegel, 1984; Terr, 1991). For these reasons, Goodwin (1985) recommends that diagnosis of personality disorders should be deferred until PTSD symptoms have resolved.

Differential Diagnosis

In PTSD, the stressor must be of an extreme nature, although the clinician has some latitude in determining whether a particular stressor is “extreme.” In contrast, the stressor can be of any severity in an adjustment disorder. *DSM-IV* (American Psychiatric Association, 1994) specifies that an adjustment disorder diagnosis should be given if the response to an extreme stressor does not meet criteria for PTSD, or in situations in which a PTSD symptom pattern occurs in response to a non-extreme stressor (such as the birth of a sibling, moving to a new neighborhood, or starting a new school).

If avoidance, numbing, and increased arousal symptoms were present prior to exposure to a traumatic event, a diagnosis of PTSD may not be appropriate after the stressor. It is possible that the child was exposed to undetected stressors prior to developing the symptoms; routine screening for exposure to domestic or community violence, child abuse, and other common stressors is essential in making this determination. Other diagnoses (e.g., a mood disorder or another anxiety disorder) should be considered instead of PTSD if the stressor did not clearly precede the PTSD symptoms. If the symptom pattern in response to this stressor meets criteria for another mental disorder, such as MDD, ADHD, or mixed substance abuse, these diagnoses should be given instead of PTSD. On the other hand, if the stressor clearly preceded the onset of PTSD symptoms and the symptom pattern meets criteria for both PTSD and another mental disorder, both diagnoses should be given.

ASD is distinguished from PTSD because the symptom pattern in ASD must both occur and resolve within 4 weeks of the traumatic event.

Recurrent intrusive thoughts occur in obsessive compulsive disorder (OCD) but are not related to an experienced traumatic event as in PTSD. In OCD, the intrusive thoughts are generally experienced as inappropriate. Flashbacks in PTSD are distinguished from other intrusive thoughts or memories of the trauma in that they involve a feeling of actually reliving the event, with some degree of dissociation. Flashbacks should be distinguished from illusions, hallucinations, and other perceptual disturbances occurring in psychotic disorders unrelated to exposure to an extreme stressor.

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

As with all other child and adolescent psychiatric disorders, the diagnostic criteria for PTSD include symptoms that may be reported as the result of contagion, suggestibility, malingering, or for personal gain. It is highly unlikely that such factors would cause a child to meet full criteria for PTSD. These factors should be considered, however, when PTSD-like symptoms are observed without a discernible history of trauma.

ASSESSMENT

The assessment of PTSD in children depends first and foremost on careful and direct clinical interviews with the child and the parents. If a parent is the alleged perpetrator of the child abuse or domestic violence that is the identified traumatic event, the non-offending parent or another caretaker should be interviewed. Specific guidelines for conducting this type of diagnostic interview are included in the outline following this text. Briefly, both parents and child should be asked directly about the traumatic event, and about PTSD symptomatology in detail. Specific questions related to reexperiencing, avoidant, and hyperarousal symptoms as described in *DSM-IV* should be asked. Particular attention should be given to the use of developmentally appropriate language when asking the child about these PTSD symptoms. The clinician should be aware of developmental variations in the presentation of PTSD symptomatology, particularly with preschool children (Scheeringa et al., 1995), and should include questions about developmentally-specific symptoms when interviewing young children.

There are many unanswered questions regarding how to assess children for the presence of PTSD. Although several questionnaires and semi-structured interviews purport to measure this disorder, there is no single instrument accepted as a “gold standard” for making this diagnosis or monitoring its symptom course. In part, the assessment of PTSD is complicated by the requirement of having a certain number of symptoms from each of three categories (reexperiencing, avoidance/numbing, and increased arousal). As a result, a single score on any instrument is not sufficient to categorically diagnose PTSD (since a child could have extremely high levels of symptomatology in one category but none in another, etc.). Parent reports tend to minimize the child’s PTSD symptomatology (Handford et al., 1986; Malmquist, 1986; Rigamer, 1986; Sack et al., 1986) and it is difficult to ascertain avoidant and numbing symptoms from child self-reports, resulting in a significant risk of underdiagnosing this disorder. Teachers and other adults may not observe or be aware of many salient PTSD symptoms because they may not be manifested at school (e.g., sleep problems or hypervigilance) or may not be obvious to the untrained observer. Physiologic measures of hyperarousal are not adequately standardized in children; nor would such measures adequately assess reexperiencing or avoidant symptoms. Thus, there are considerable limitations inherent in assessing PTSD in children.

On the other hand, there is concern that some clinicians overdiagnose PTSD due to a lack of awareness of the specific diagnostic criteria required, and a misperception that the presence of reexperiencing and anxiety symptoms alone following exposure to an extreme stressor are adequate to diagnose PTSD. This concern has led to recent attempts to more rigorously educate clinicians regarding this disorder.

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

One area of agreement among experts in assessing PTSD in children relates to the need to directly ask the child about PTSD symptoms as they relate to the stressor. As Wolfe et al. (1994) note, “Most children cannot report their psychological reactions to the trauma unless they are specifically asked about aspects of the trauma”(p. 48). Pynoos and Eth (1986) also state that an open discussion specifically about the trauma is necessary to adequately assess as well as to resolve PTSD symptoms. Often clinicians do not directly ask children about the traumatic event and its impact on the child, either for fear of upsetting the child, because of the clinician’s own avoidance of painful discussions, or in some cases, for fear of “tainting” the child’s description of the trauma (for example, if the child will be testifying in court against the perpetrator in an abuse situation) (Benedek, 1985). It is likely that such clinicians will miss important PTSD symptoms. Almqvist and Brandell-Forsberg (1997) have documented that information provided by young children regarding their trauma-related symptoms significantly increased the prevalence of PTSD diagnoses over that obtained from relying solely on parental reports of symptomatology. Thus, there is empirical evidence to support the importance of asking children directly about the traumatic event, as well as a strong clinical consensus that if children are not asked, they are less likely to discuss their PTSD symptoms.

Pynoos and Eth (1986) describe a clinical interview with the child designed to assess PTSD symptoms as well as to provide an initial intervention. They report that in use with more than 200 children aged 3 to 16 years, this interview format was helpful in diagnosing PTSD. No empirical data are presented on inter-rater reliability of diagnosis using the suggested format.

Several semi-structured interviews are available to assess PTSD in children. These are summarized in Table 1.

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

TABLE 1
Semi-Structured Interviews Used to Assess PTSD in Children and Adolescents

Measure (Source)	DSM Version Used	Reliability & Validity Data
Schedule for Assessment of Depression and Schizophrenia - Present and Lifetime Version for Children -PTSD Scale (Kaufman et al., 1997)	<i>DSM-IV</i>	High inter-rater reliability, good test-retest reliability
Diagnostic Interview for Children and Adolescents - PTSD (Famularo et al., 1996)	<i>DSM-III-R</i>	None
Diagnostic Interview Schedule - PTSD (Garrison et al., 1995)	<i>DSM-III-R</i>	None
Structured Clinical Interview for <i>DSM-III-PTSD</i> (Hubbard et al., 1995)	<i>DSM-III</i>	None
Clinician-Administered PTSD Scale for Children and Adolescents, <i>DSM-IV</i> Version (Nader et al., 1996)	<i>DSM-IV</i>	Currently being evaluated
Childhood PTSD Interview-Child Form (Fletcher, 1997a)	<i>DSM-IV</i>	High inter-rater reliability, strong construct and convergent validity

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

Several self- and parent-report instruments that measure PTSD symptoms in children, although none generate a single score that indicates the presence or absence of this disorder. These instruments are described in Table 2 and Table 3.

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

TABLE 2
Instruments That Measure All PTSD Symptoms in Children and Adolescents

Measure (Source)	Format	DSM Version Used	Reliability & Validity Data	Age	Comments
PTSD Reaction Index (Friedrich, 1985; Goenjian et al., 1995; Pynoos et al., 1987)	20-item self-report (may also be used as semi-structured interview)	<i>DSM-III</i>	High correlation with clinical diagnosis	Not specified	Adapted from adult version Most commonly used instrument in published research studies Composite score indicates severity of PTSD symptoms
Child PTSD Symptom Scale (Johnson et al., 1996)	17-item self-report	<i>DSM-IV</i>	High internal consistency, test-retest reliability and convergent validity with RI	Not specified	Based on adult scale (Foa et al., 1995) Currently being field tested Specifically designed for research as well as clinical use
Children's PTSD Inventory (Saigh, 1988, 1989; March, in press)	Self-report with five subscales (exposure, reexperiencing, avoidance, hyperarousal, degree of distress)	<i>DSM-IV</i>	High inter-rater reliability, sensitivity and specificity of diagnosis, high correlation with clinical diagnosis	Not specified	Only instrument that provides discrete diagnosis of no PTSD or acute, chronic, or delayed-onset PTSD
Checklist for PTSD Symptoms in Infants and Young Children (Scheeringa et al., 1995)	Clinician rated symptom inventory	DSM-IV	None	0–3 years	Alternative symptom checklist for diagnosing PTSD in infants and toddlers

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

Posttraumatic Stress Inventory for Children (Eisen, 1997)	30-item interview	DSM-IV	High internal consistency, preliminary convergent validity	4–8 years	Specifically designed for use in younger children
When Bad Things Happen Scale (Fletcher, 1997b)	95 item self-report	DSM-IV	High internal consistency and convergent validity	3rd grade	Includes a parent report version (Parent Report of Child's Reaction to Stress)
PTSD Checklist/Parent Report (Ford et al., 1996)	17-item parent report	<i>DSM-IV</i>	High internal consistency, good inter-rater reliability, strong convergent and construct validity	Not specified	Standardized on pediatric medical trauma population
Checklist of Child Distress Symptoms (Martinez and Richters, 1993)	25-item self-report	<i>DSM-III-R</i>	High inter-rater and concurrent validity	6–17 years	Specifically designed for use in children Has a parallel parent-report version
CCDS-Parent Report (Richters and Martinez, 1990)	28-item parent-report	<i>DSM-III-R</i>	High inter-rater and concurrent validity	6–17 years	Parallels child version
“Levonn” (Richters et al., 1990)	40-item self-report pictorial/visual thermometer rating scale in response to questions read to child	<i>DSM-III-R</i>	None	<6 years	Only self-report instrument for preschoolers
Child Stress Reaction Checklist (Saxe et al., 1997)	35-item parent, teacher or medical staff report	<i>DSM-IV</i>	High preliminary inter-rater reliability and construct validity	Not specified	Standardized on acutely burned children Also measures Acute Stress Disorder

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

Trauma Symptom Checklist for Children (Briere, 1995)	54-item self-report	<i>DSM-IV</i>	High test-retest reliability and internal consistency of subscales	8–17 years	Measures sequelae of trauma on six subscales PTSD subscale primarily measures reexperiencing Sensitive to treatment effects (Deblinger et al., 1996; Lanktree and Briere, 1995) Age and gender specific norms available
Children’s Impact of Traumatic Event Scale (Wolfe et al., 1989)	52-item self-report	<i>DSM-III-R</i>	High internal consistency and independence of subscales	Not specified	Particularly applicable to sexually abused children
Child Sexual Behavior Inventory (Friedrich et al., 1992)	45-item self report	N/A	High test-retest reliability and internal consistency	2–18 years	Measures repetitive sexualized behaviors Specifically applicable to sexually abused children Age and gender specific norms available Sensitive to treatment effects
Weekly Behavior Report (Cohen and Mannarino, 1996b)	22-item parent report	<i>DSM-IV</i>	High test-retest reliability, convergent validity and internal consistency	3–7 years	Measures anxiety, avoidance, sleep problems and pre-occupation with sexual abuse-related words and behaviors Specifically applicable to sexually abused young children Sensitive to treatment effects

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

TABLE 3
Instruments That Measure Specific Aspects of PTSD in Children and Adolescents

Measure (Source)	Format	DSM Version Used	Reliability & Validity Data	Age	Comments
Trauma Symptom Checklist for Children (Briere, 1995)	54-item self-report	<i>DSM-IV</i>	High test-retest reliability and internal consistency of subscales	8–17 years	Measures sequelae of trauma on six subscales PTSD subscale primarily measures reexperiencing Sensitive to treatment effects (Deblinger et al., 1996; Lanktree and Briere, 1995) Age and gender specific norms available
Children’s Impact of Traumatic Event Scale (Wolfe et al., 1989)	52-item self-report	<i>DSM-III-R</i>	High internal consistency and independence of subscales	Not specified	Particularly applicable to sexually abused children
Child Sexual Behavior Inventory (Friedrich et al., 1992)	45-item self report	N/A	High test-retest reliability and internal consistency	2–18 years	Measures repetitive sexualized behaviors specifically applicable to sexually abused children Age and gender specific norms available Sensitive to treatment effects

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

Weekly Behavior Report (Cohen and Mannarino, 1996b)	22-item parent report	<i>DSM-IV</i>	High test-retest reliability, convergent validity and internal consistency	3–7 years	Measures anxiety, avoidance, sleep problems and pre-occupation with sexual abuse-related words and behaviors Specifically applicable to sexually abused young children Sensitive to treatment effects
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AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

In summary, although there are several instruments available for assessing PTSD related symptoms, none of the existing self- or parent-report measures is optimal. Saigh et al. (1996) and Kratochwill (1996) emphasize the need for multi source, multi score assessment instruments that measure PTSD across different areas of functioning. Although instruments may have great value in evaluating and following the clinical course of children with PTSD, instruments cannot take the place of a careful and direct clinical interview in assessing PTSD diagnostic criteria. The use of semi-structured interviews with documented reliability and validity of the PTSD section, although cumbersome and time-consuming to administer, may be of value to clinicians who lack extensive clinical experience in assessing children for PTSD symptoms. However, to date, only three of these semi-structured interviews has been modified to correspond to *DSM-IV* criteria and none has been extensively psychometrically evaluated with regard to *DSM-IV* clinical PTSD diagnosis. Assessment of PTSD symptoms therefore continues to rely primarily on the clinical interview of the child and parents.

PTSD is unique among psychiatric disorders because diagnosing it requires the presence of an etiologic event (Koverola, in press). Historically, clinicians have never had to prove exposure of the patient to the trauma to diagnose PTSD, beyond ascertaining the patient's self-reported exposure. Self-report has been the standard for establishing the presence of the traumatic event in adults with PTSD, and most empirical studies have depended upon self-reported exposure in studying PTSD. Although many studies of PTSD in children have also solicited parent- and/or teacher-report of symptomatology, and the parent's perception of the child's traumatic experience, most have relied on the child's own report regarding trauma exposure. At least one empirical study has indicated that development of PTSD is predicted by self-reported exposure to violence rather than by objective measures of actual levels of criminal violence (Berton and Stabb, 1996). Reliance on self-reported exposure to trauma has not been called into question until recently. Concerns that patients may be vulnerable to suggestive influences, whether in or out of psychiatric settings, has led to the idea that the child's self-reported exposure to the traumatic event should be investigated or proven prior to diagnosing or treating PTSD. Parent reports in this regard may not be reliable, either because the parent is unaware that the trauma occurred or because (in the case where a parent is the alleged perpetrator) the parent has a strong motivation not to corroborate the child's traumatic experience.

There are several important differences between clinical and forensic evaluations (Appelbaum, 1997; Greenberg and Shuman, 1997; Strasburger et al., 1997). These practice parameters apply to clinical rather than forensic assessments. In some situations it may be optimal for a child to receive an independent forensic evaluation prior to receiving a clinical evaluation and treatment, and such a forensic assessment may directly address the issue of the child's credibility regarding self-reported exposure to traumatic events (American Academy of Child and Adolescent Psychiatry, 1997). However, there is strong consensus that the roles of forensic evaluator and treating clinician should remain separate. It should be emphasized that practitioners in either clinical or forensic roles must comply with state reporting requirements with regard to child abuse allegations.

One area of controversy relates to the number of symptoms from each category (reexperiencing, avoidance, and increased arousal) that need to be present to diagnose PTSD in children (Saigh, 1988). Perhaps an even more basic issue is whether children who meet full diagnostic criteria are different in some significant way from children who meet "partial" PTSD criteria (i.e., exhibit several PTSD symptoms but do not meet

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

criteria as defined by *DSM-IV*). Is PTSD at full criteria a discrete disorder in any functional way, or do PTSD symptoms occur on a continuum of frequency and severity, with “full” criteria representing an arbitrary cut-off point rather than a clinically meaningful dividing point (Terr, 1991)? Empirical data to directly address these issues are lacking, although it has been documented that the percentage of children diagnosed with PTSD varies greatly depending on which DSM criteria (III, III-R, or IV) are used (Schwarz and Kowalski, 1991a) and whether a liberal or conservative threshold is used to define “persistent” symptoms (Schwarz and Kowalski, 1991b; Stoddard et al., 1989). Several authors have suggested that the adult PTSD diagnostic criteria “may not be wholly appropriate for children’s anxiety reaction to stress” (Garmezy, 1986, p. 391). For example, it has been pointed out that while reexperiencing and avoidant symptoms may occur in close temporal proximity, they are in many ways opposite symptoms, and thus, children may experience long periods of reexperiencing alternating with long periods of avoidance and numbing, rather than experiencing both at the same time (Horowitz, 1976; Miller and Veltkamp, 1988; Rigamer, 1986; Schwarz and Kowalski, 1991a). Significant under diagnosis of PTSD in children may result. Some authors also have indicated that if avoidance and affective numbing are highly effective, the child may appear to be unaffected by the trauma or reexperiencing symptoms may be masked (Arroyo and Eth, 1995; Stuber et al., 1991). As Green (1991) points out, assessing avoidant (denial) symptoms is limited by definition, as is the child’s ability to link such symptoms to the trauma. She argues that the requirement of three avoidant/numbing symptoms is therefore too stringent for a PTSD diagnosis in children.

Earls et al. (1988), Frederick (1985), and Lyons (1987) discuss several other methodological problems in assessing PTSD symptoms in children. Goodwin (1985) suggests that maladaptive expressions of fear and anger may mask a PTSD diagnosis and lead instead to a diagnosis of conduct disorder (with externalized aggression) or borderline personality disorder (with self-injurious behavior), especially in adolescents. Many authors have suggested the need for developmental stage-specific diagnostic criteria for PTSD (Benedek, 1985; Drell et al., 1993; Eth and Pynoos, 1985; Green et al., 1991; Horowitz, 1996; Terr, 1985; Terr, 1990). Thus, although *DSM-IV* diagnostic criteria are used to diagnose PTSD in children, there is ongoing debate regarding how accurately these criteria describe childhood PTSD. Extensive field trials are needed to evaluate the validity of current PTSD criteria for children and adolescents.

A final controversy regarding PTSD is succinctly framed by Yehuda and McFarlane (1995), who address the conflict between the desire to normalize victims (as expressed by advocacy groups who pressed for the initial *DSM-III* recognition of PTSD as a “normal reaction to abnormal stress”) and empirical evidence suggesting that PTSD is a rare psychiatric disorder with clear predisposing factors and distinct physiologic abnormalities. In other words, are trauma survivors with PTSD psychiatrically damaged or are they experiencing normal adaptation? Although this controversy is far from resolved, it would appear that one can recognize predisposing risk factors and the psychiatric comorbidity of PTSD without blaming the trauma victim. A reasonable practice is to offer treatment to children with clinically significant PTSD symptoms (i.e., severe enough to impair their functioning in at least one important domain), whether or not they meet strict *DSM-IV* PTSD diagnostic criteria.

TREATMENT

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

Despite the paucity of empirical treatment-outcome studies, strong clinical consensus among experts in the field suggests essential components of treatment for children with PTSD, including direct exploration of the trauma, use of specific stress management techniques, exploration and correction of inaccurate attributions regarding the trauma, and inclusion of parents in treatment (Berliner, in press; Friedrich, 1996).

Very limited empirical support exists for various treatment interventions for children with PTSD. Solomon et al. (1992) examined the treatment literature for PTSD and found somewhat greater empirical support for the use of cognitive behavioral therapy (CBT) than for other forms of psychotherapy or medication in treating this disorder. However, this review was based entirely on studies with adult populations. Garmezny (1986) critiqued the difficulties inherent in empirically studying the impact and treatment of stress on children. Only four controlled studies have examined treatment of PTSD symptoms in children.

Deblinger et al. (1996) used trauma-focused CBT to treat 100 sexually abused children. Subjects were randomly assigned to one of four treatment conditions: child-only receiving CBT, parent-only receiving CBT, child and parent receiving CBT, or assignment to a community treatment control. Results indicated that although all groups improved as measured by the Kiddie-SADS-E PTSD section, the two conditions in which the child received direct treatment demonstrated significantly greater improvement in PTSD symptoms than the other two conditions. This study also demonstrated that including the parent in treatment produced significantly more improvement in externalizing and depressive symptoms.

Cohen and Mannarino (1996a) evaluated trauma-focused CBT for sexually abused preschoolers and their parents. Children were randomly assigned to either the CBT intervention or a nondirective supportive therapy condition. Child PTSD symptoms (as measured by the Weekly Behavior Report) and sexually inappropriate behaviors (as measured by the Child Sexual Behavior Inventory) (Friedrich et al., 1992) significantly decreased in the CBT group only; significant group x time interactions were found at post-treatment (Cohen and Mannarino, 1996a).

A recent study by Goenjian et al. (1997) empirically examined the effectiveness of school-based grief/trauma-focused psychotherapy in decreasing chronic PTSD and depressive symptoms in adolescents following a highly destructive earthquake in Armenia. Children in four schools near the epicenter of the earthquake were evaluated 1½ years after the earthquake; children in two schools were then provided with treatment while children in the remaining two schools were untreated. Pretreatment levels of PTSD (as measured by the Reaction Index) and depression were high in both groups. The treatment included direct exploration of the trauma, relaxation and desensitization procedures, resolution of grief through focusing on nontraumatic memories, and group support through recognition of the commonality of PTSD symptoms among peers. The treated group experienced significant improvement in PTSD and depressive symptoms, whereas these symptoms significantly worsened in the untreated group.

Field et al. (1996) evaluated the impact of massage therapy with children exposed to Hurricane Andrew. They randomly assigned 50 children to massage therapy or to a video attention-control condition. Children completed the PTSD Reaction Index (RI) pre- and post-treatment. Prior to treatment, both groups scored in the severe range on the RI. The massage therapy group experienced significantly more improvement than the control

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

group on post-treatment RI scores. This study thus supported the use of muscle relaxation techniques for decreasing PTSD symptomatology.

The first three studies cited above lend empirical support to the use of CBT interventions that include direct discussion of the trauma, desensitization and relaxation techniques, cognitive reframing, and contingency reinforcement programs for problematic behaviors in treating children with PTSD (Cohen and Mannarino, 1993; Deblinger and Heflin, 1996).

PSYCHOTHERAPY

Direct exploration with the child of the traumatic event and its impact makes intuitive sense if PTSD is conceptualized as a direct response to that event. However, some clinicians avoid directly discussing the event for fear of transiently increasing the child's symptomatology or because of their own need to avoid the negative affect associated with such discussion (Benedek, 1985). There is a powerful adult desire to "let sleeping dogs lie" in children, even if PTSD symptoms suggest that the impact of the trauma is not dormant. The child's own avoidance of talking about the trauma also is often a reason therapists hesitate to directly discuss it. Many therapists have been discouraged from directly discussing certain traumatic events (e.g., child abuse) for fear of tainting the child's potential testimony in subsequent legal proceedings. This concern has arisen from recent controversy regarding the suggestibility of children's memories and the idea that repeated suggestive questioning may change a child's memory regarding the factual aspects of an event (Ceci et al., 1996). However, even if this premise is accepted, and empirical evidence is quite contradictory on this score, direct exploration of the traumatic experience and its meaning to the child as used in psychotherapy does not involve repeated suggestive attempts to alter the child's description of what occurred. Rather, it involves encouraging a child, through relaxation and desensitization procedures, to describe the event with diminished hyper arousal and negative affect. According to Benedek (1985), "Retelling is equivalent to reworking (and is) one attempt at mastery of an experience" (p. 11). Terr (1990) believes that simply asking children about the traumatic experience and how it affected them often seems to have a positive effect. Pynoos and Eth (1986) state that an open discussion of the trauma is essential to mastering anxiety and grief, and that such interventions produce almost immediate relief, not further distress.

Authors vary in the degree to which they advocate explicit exposure techniques. While Deblinger and Heflin (1996) and March et al. (1996) recommend systematic gradual exposure to increasingly upsetting aspects of the trauma, other protocols do not include hierarchical exposure. Regardless of the specific manner in which the trauma is addressed, several authors consider some form of trauma-focused discussion and reconsideration to be the most critical component of treatment for PTSD in children (Azarian et al., 1996; Benedek, 1985; Berliner, in press; Friedrich, 1996; Galante and Foa, 1986; Janoff-Bulman, 1985; Kardiner and Spiegel, 1947; Parson, 1995, 1997; Pynoos and Eth, 1985, 1986; Pynoos and Nader, 1988; Rigamer, 1986; Saigh et al., 1996; Saigh, 1986; Silvern et al., 1995; Snodgrass et al., 1993; Terr, 1990). Thus, strong clinical consensus as well as limited empirical evidence (Cohen and Mannarino, 1996a; Deblinger et al., 1996; Goenjian et al., 1997) support trauma-focused interventions for these children.

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

These results do not require therapists to insist on traumatized children participating in exposure activities prior to treatment termination. Exposure-based therapies are designed primarily for situations in which traumatic memories or avoidance produce psychological distress. Persistent talking about traumatic memories with children who are very embarrassed or highly resistant may not be indicated, and may in fact worsen symptoms. Indirect methods of addressing traumatic issues, such as art and play techniques, may be helpful in these situations. Children exposed to a known trauma who are asymptomatic may not require treatment but may need monitoring for emergence of delayed or “sleeper” symptoms (Mannarino et al., 1991; Pfeffer, 1997).

Stress management techniques frequently are paired with direct discussion of the traumatic event. Siegel (1995) has provided a neuro-cognitive explanation of why stress management may alleviate PTSD symptoms. Progressive muscle relaxation, thought-stopping, positive imagery, and deep breathing are taught to the child prior to detailed discussions of the trauma (Cohen and Mannarino, 1993; Deblinger and Heflin, 1996; Parson, 1997; Saigh et al., 1996; Saigh, 1986; Snodgrass et al., 1993). Mastering these skills gives the child a sense of control over thoughts and feelings rather than feeling overwhelmed by them, and allows the child to approach the direct discussion of the traumatic event with confidence that this will not lead to uncontrollable reexperiencing symptoms and fear. Stress management techniques also are useful to the child outside of the therapeutic context, if and when reexperiencing phenomena occur.

Another element common to most interventions for traumatized children involves evaluation and reconsideration of cognitive assumptions the child has made with regard to the traumatic event (Berliner, in press; Cohen and Mannarino, 1993; Deblinger and Heflin, 1996; Joseph et al., 1993; Pynoos and Eth, 1986; Spaccarelli, 1995). Faulty attributions regarding the trauma (e.g., “It was my fault,” “Nothing is safe anymore”) should be explored and challenged, beyond mere reassurances. Challenging most often is accomplished through step-by-step logical analysis of the child’s cognitive distortions within therapy sessions. Other issues, such as survivor’s guilt and omen formation, also should be challenged.

Expert consensus also indicates that inclusion of parents and/or supportive others in treatment is important for resolution of PTSD symptoms. Parental emotional reaction to the traumatic event and parental support of the child are powerful mediators of the child’s PTSD symptomatology. Including parents in treatment helps them monitor the child’s symptomatology and learn appropriate behavioral management techniques, both in the intervals between treatment sessions and after therapy is terminated. In addition, helping parents resolve their emotional distress related to the trauma, to which the parent usually has had either direct or vicarious exposure, can help the parent be more perceptive of and responsive to the child’s emotional needs (Burman and Allen-Meares, 1994; Rizzone et al., 1994). Many parents benefit from direct psycho education regarding their child’s PTSD symptoms and how to manage these (Deblinger and Heflin, 1996; Parson, 1997; Rigamer, 1986). Most authors describing treatments for children with PTSD recommend including one or more parent-directed components (Berliner, in press; Blom, 1986; Brent et al., 1995; Burman and Allen-Meares, 1994; Butler et al., 1996; Cohen and Mannarino, 1993; Deblinger and Heflin, 1996; Friedrich, 1996; Galante and Foa, 1986; Kolko, 1996; Macksoud and Aber, 1996; Parson, 1997; Rigamer, 1986; Simons and Silveira, 1994; Terr, 1989).

Data on the efficacy of group versus individual therapy for children with PTSD are scarce. A meta analysis of treatment outcome studies for PTSD in adult women

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

survivors of childhood sexual abuse demonstrated a larger effect size for individual therapy than group treatment across a variety of therapeutic approaches (Chard, 1994). Friedrich (1996) concluded that, in general, a trauma-focused approach that treats the child's specific symptoms is more important than the treatment modality (group, family, individual) used. Although most treatment descriptions emphasize individual child therapy, several authors have focused on the efficacy of providing crisis intervention to parents, teachers, and/or children in groups at school, in the hospital, or in other community settings (Blom, 1986; Galante and Foa, 1986; Goenjian et al., 1997; LeGreca et al., 1996; Pynoos and Nader, 1988; Rigamer, 1986; Stallard and Law, 1993; Stoddard, 1996; Sullivan and Evans, 1994; Yule and Udwin, 1991). Many of these interventions used convenience samples of schools or towns exposed to a common traumatic event. Group interventions in such situations provide the most timely intervention to the largest possible number of exposed children, and should be strongly considered. The rationale for crisis intervention following this type of trauma is that timely direct discussion of the event and its impact may prevent the development of avoidance and other PTSD symptoms in large numbers of exposed children.

Treatment of the dissociative symptoms described in some children with chronic PTSD is more complex. Clinicians should be aware that some children with PTSD have prominent dissociative symptoms that may take the form of hallucinations or disorganized thinking and behavior. These symptoms may be difficult to distinguish from psychotic states, and should be understood as manifestations of PTSD rather than a form of psychosis. In the case of sexually and physically abused children, the use of physical restraint or forcible medication administration may produce further trauma or worsen symptoms. Clinicians should be cautious in using these interventions or in diagnosing psychosis in children and adolescents with a history of significant trauma. Because of the complexity of treating PTSD complicated by dissociative symptoms, clinicians should consult additional references, such as Putnam (1997), Lewis and Putnam (1996), and Silberg (1996).

Not all behavioral and emotional problems in children with PTSD are necessarily related to the trauma. In treating children with PTSD, it is essential that the clinician recognize the presence of preexisting and comorbid psychiatric disorders, and provide appropriate interventions for these difficulties in conjunction with trauma-focused treatment.

OTHER PSYCHOSOCIAL TREATMENTS

Several alternative treatment techniques have been described for use in children with PTSD. Pynoos and Nader (1988) describe a "psychological first aid" approach for children exposed to community violence, which may be offered in schools as well as in traditional treatment settings. This model emphasizes clarifying the facts about the traumatic event, normalizing children's PTSD reactions, encouraging expression of feelings, teaching problem-solving techniques, and referring for ongoing treatment for the most symptomatic children. Chemtob et al. (1997) describe a similar intervention, psychological debriefing, for use in disaster situations. Sullivan and Evans (1994) advocate a treatment approach that integrates trauma-focused interventions with 12-step interventions for use in adolescents with PTSD and chemical dependency. Lowenstein (1995) has described the use of a therapeutic activity book, the *Resolution Scrapbook*, as an aid to treating children with PTSD. Many authors advocate the use of psycho

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

education for parents and teachers to enlist their support for traumatized children (Blom, 1986; Butler et al., 1996; Galante and Foa, 1986; LaGreca et al., 1996; Molta, 1995; Nir, 1985; Rigamer, 1986). Education about the traumatic experience (common emotional reactions to this kind of event, how to respond/protect oneself if this event were to recur, etc.) may also be beneficial to children. Some have advocated psychoanalytic interventions for children with PTSD (Gaensbauer, 1994). No empirical studies have documented the efficacy of these interventions, which may be of significant value in certain clinical situations.

Additional specialized interventions may be necessary for children exhibiting particularly problematic PTSD symptoms, such as inappropriate sexual behavior. Specific treatment protocols are available (MacFarlane and Cunningham, 1986); and referral to specialized treatment programs may be appropriate in these situations.

Eye movement desensitization and reprocessing (EMDR) is an intervention that combines cognitive therapy components with directed eye movements. There is some empirical support for the effectiveness of EMDR in reducing PTSD symptoms in adults (Forbes et al., 1994; Wilson et al., 1995). One study demonstrated that an EMDR intervention with no eye movement was as effective as standard EMDR, indicating that the cognitive interventions rather than eye movement per se may account for EMDR's impact on PTSD symptoms (Pitman et al., 1996). No controlled studies have evaluated the risks and benefits of EMDR in children and adolescents.

PSYCHOPHARMACOLOGY

As noted above, a few studies have indicated that some children with PTSD exhibit physiologic abnormalities similar to those seen in adults with PTSD. Although findings are preliminary, these reports have led clinicians to prescribe a variety of medications for children with PTSD, despite a lack of randomized trials supporting efficacy. Loeff et al. (1995) reported that carbamazepine at serum levels of 10.0 to 11.5 ug/mL resulted in complete remission of symptoms in 22 out of 28 children with PTSD. These findings were complicated by the fact that several of the children were concurrently taking Ritalin, clonidine, selective serotonin reuptake inhibitors (SSRIs), or tricyclic antidepressants. Famularo et al. (1988) demonstrated significant decreases in PTSD symptomatology in 11 sexually and/or physically abused children following a 5-week course of propranolol. Neither study used a control group or randomization of treatment.

Marmar et al. (1993) and DeBellis et al. (1994a) suggested but did not empirically evaluate the possibility that an α -2 adrenergic agonist such as clonidine might be more effective than psychostimulants for ADHD symptoms in sexually abused and other children with comorbid PTSD. Horrigan (1996) reported a single case study in which a long acting α -2 agonist, guanfacine, was successful in reducing nightmares in a 7-year-old child with PTSD. Harmon and Riggs (1996) reported a decrease in at least some PTSD symptoms in all seven children included in an uncontrolled clinical trial using clonidine patches. Brent et al. (1995) suggested that antidepressants may be helpful for some children with PTSD, particularly those with a predominance of depressive or panic disorder symptoms. To date, there have been no empirical studies of antidepressants for PTSD in children.

At this time there is inadequate empirical support for the use of any particular medication to treat PTSD in children (March et al., 1996). Drawing from the adult

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

literature, it appears that the use of conventional psychotropic medication for PTSD is at most mildly effective (Davidson and March, 1997). Due to the lack of adequate empirical data, clinicians must rely on judgment to determine the appropriateness of psychopharmacologic interventions in children with PTSD who have prominent depressive, anxiety, panic, and/or ADHD symptoms. As a general practice medication should be selected on the basis of established practice in treating the comorbid condition (e.g., antidepressants for children with prominent depressive symptoms). Because of their favorable side effect profile and evidence supporting effectiveness in treating both depressive and anxiety disorders, SSRIs often are the first psychotropic medication chosen for treating pediatric PTSD. Imipramine also is used frequently with children with comorbid panic symptoms.

Due to the lack of empirical studies evaluating efficacy of treatment for PTSD in children, it is premature to recommend a hierarchy of interventions. However, outpatient psychotherapy is generally considered the preferred initial treatment, with psychotropic medications used as an adjunctive treatment in children with prominent depressive or panic symptoms.

CONFLICT OF INTEREST

As a matter of policy, some of the authors to these practice parameters are in active clinical practice and may have received income related to treatments discussed in these parameters. Some authors may be involved primarily in research or other academic endeavors and also may have received income related to treatments discussed in these parameters. To minimize the potential for these parameters to contain biased recommendations due to conflict of interest, the parameters were reviewed extensively by Work Group members, consultants, and Academy members; authors and reviewers were asked to base their recommendations on an objective evaluation of the available evidence; and authors and reviewers who believed that they might have a conflict of interest that would bias, or appear to bias, their work on these parameters were asked to notify the Academy.

SCIENTIFIC DATA AND CLINICAL CONSENSUS

Practice parameters are strategies for patient management, developed to assist clinicians in psychiatric decision-making. These parameters, based on evaluation of the scientific literature and relevant clinical consensus, describe generally accepted approaches to assess and treat specific disorders, or to perform specific medical procedures. The validity of scientific findings was judged by design, sample selection and size, inclusion of comparison groups, generalizability, and agreement with other studies. Clinical consensus was determined through extensive review by the members of the Work Group on Quality Issues, child and adolescent psychiatry consultants with expertise in the content area, the entire Academy membership, and the Academy Assembly and Council.

These parameters are not intended to define the standard of care; nor should they be deemed inclusive of all proper methods of care or exclusive of other methods of care directed at obtaining the desired results. The ultimate judgment regarding the care of a particular patient must be made by the clinician in light of all the circumstances presented by the patient and his or her family, the diagnostic and treatment options available, and

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

available resources. Given inevitable changes in scientific information and technology, these parameters will be reviewed periodically and updated when appropriate.

**Outline of Practice Parameters for the Assessment and Treatment
of Children and Adolescents With Posttraumatic Stress Disorder**

- I. Diagnostic assessment.
- A. Interview with parent or primary caregiver (Note: If a parent is the alleged perpetrator of child abuse or domestic violence that is the identified traumatic event, the non-offending parent or other primary caretaker should be interviewed. Interview of the alleged perpetrator is not required to diagnose and treat PTSD in the child.)
1. Obtain report of the traumatic event(s) and determine whether it qualifies as an “extreme” stressor.
 - a. Note the nature of the event, when it occurred, the parents’ perception of the child’s degree of exposure to the event.
 2. Obtain report of any preceding, concurrent, or more recent stressors in the child’s life.
 - a. Child abuse or neglect.
 - b. Significant conflict, separation, or divorce.
 - c. Frequent moves, school changes, or other significant disruptions.
 - d. Family deaths, illnesses, disabilities, or substance abuse.
 - e. Exposure to domestic or community violence.
 - f. Serious traumatic events in the parents’ lives of which the child has knowledge.
 3. Obtain report of *DSM-IV* PTSD symptomatology in the child, with particular attention to developmental variations in clinical presentation.
 - a. Reexperiencing symptoms.
 - b. Avoidant and numbing symptoms.
 - c. Increased arousal symptoms.
 4. Obtain report of any other significant current symptomatology, with particular attention to disorders with high comorbidity with PTSD.
 - a. Depressive symptoms including self-injurious behavior.
 - b. Non-PTSD anxiety symptoms, including panic attacks.
 - c. ADHD and conduct symptoms.
 - d. Substance abuse.
 5. Obtain report of whether the symptoms began prior to or following the identified traumatic event(s). (Note: This determination may be difficult if the stressor has been longstanding or ongoing; e.g., physical abuse).
 6. Obtain report of the parents’ and other significant others’ emotional reaction to the traumatic event.
 - a. Ascertain whether the parent or primary caregiver was directly exposed to the trauma (e.g., driving when a motor vehicle accident occurred) or experienced only vicarious exposure (e.g., child disclosed sexual abuse by a stranger).
 - b. Obtain report of the presence of parental PTSD symptoms following the traumatic event.

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- c. Obtain perception of how much support has been available to the child since the event.
 7. Obtain report of child's past psychiatric history.
 - a. Outpatient psychotherapy.
 - b. Partial or inpatient hospitalization.
 - c. Psychotropic medications.
 - d. Symptom course.
 8. Obtain medical history.
 - a. Significant current or past medical problems, somatic complaints, surgery, significant injuries.
 - b. Current or past medications.
 - c. Current primary medical care provider.
 9. Obtain report of child's developmental history, with particular emphasis on reactions to normal stressors (e.g., birth of sibling, beginning school) and child's level of functioning prior to the traumatic stressor.
 10. Obtain report of school history, with particular emphasis on changes in school behavior, concentration, activity level, and performance since the traumatic stressor.
 11. Obtain report of family history and family members' medical/psychiatric history.
 - a. PTSD symptoms or diagnosis.
 - b. Mood disorders.
 - c. Anxiety disorders.
 - d. Family medical conditions including any that may present as anxiety or mood disorders (e.g., thyroid disease).
- B. Interview with the child, including mental status exam.
 1. Obtain child's report of the reason for referral.
 2. Encourage child to describe his or her memories of the traumatic event. (Note: There is no consensus regarding the optimal degree of detail, or whether certain kinds of leading questions are helpful or harmful. Clinical consensus clearly indicates that requesting some description of the stressor from the child is desirable but that the use of highly suggestive questioning is not recommended.)
 3. Obtain the child's report of trauma-related attributions and perceptions.
 - a. Who or what the child believes was responsible for the traumatic event.
 - b. Whether the child believes he or she had any responsibility for causing or perpetuating the traumatic event.
 - c. Whether the child believes he or she should have behaved differently in response to the event.
 - d. Whether the child feels ostracized, damaged, or negatively judged by others as a result of being exposed to the stressor.

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- e. The child's perception of how emotionally distressed and supportive parents and significant others have been since the traumatic event.
 - f. In cases where the stressor was not public knowledge, child's perception of w
 - g. The child's perception of how "normal" his or her current symptoms are in reaction to the stressor.
4. Obtain child's report of present symptomatology, with particular emphasis on developmentally appropriate questioning regarding *DSM-IV* PTSD criteria symptoms. (Note: Although it is important for the evaluator to explore with the child the link between the traumatic event and PTSD symptomatology, many children may not make this connection. This should not deter the evaluator from diagnosing PTSD if the temporal relationship between the event and symptom formation as reported by child or parent supports this diagnosis.)
5. Obtain child's report of symptomology frequently associated with PTSD.
- a. Depressive symptoms, including suicidal ideation.
 - b. Substance abuse or self-injurious behavior (in older children and adolescents).
 - c. Dissociative symptoms, including fugue states, periods of amnesia, depersonalization or derealization (in older children and adolescents).
 - d. Panic attacks and other non-PTSD anxiety symptoms.
6. Observe the child for the elements of the mental status exam and for behaviors that are found with PTSD.
- a. Increased startle reaction or vigilance.
 - b. Traumatic reenactment (in younger children).
 - c. Observable changes in affect or attention that may be indicative of reexperiencing phenomena.
- C. Obtain information from school with appropriate release of information, if clinically indicated. (Note: Although school reports may be helpful with regard to confirming certain symptoms or post-traumatic changes, in many cases, school reports are not necessary to diagnose or treat PTSD in children.)
- 1. Academic functioning with particular attention to changes since the traumatic event.
 - 2. Interactions with peers and involvement in non-academic activities, with particular attention to changes since the traumatic event.
 - 3. Temporal appearance of ADHD symptoms (i.e., present prior to or only after the traumatic event).
- D. Determine the need for additional evaluations (IQ testing, speech and language evaluation, pediatric evaluation).
- E. Consider the usefulness of standardized interviews and rating scales. Although semistructured interviews and parent- and child-rating scales of PTSD symptomatology may be helpful in following clinical course of children with PTSD, the diagnosis of PTSD is based primarily upon the clinical interview.

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

The use of standardized interviews and scales is not necessary to make this diagnosis.

1. Semistructured interviews. The following semistructured interviews include PTSD sections; none has established psychometric properties for measuring *DSM-IV* PTSD symptoms in children.
 - a. K-SADS-PL.
 - b. Diagnostic Interview Schedule.
 - c. Structured Clinical Interview for *DSM-III-R*.
 - d. Clinician-Administered PTSD Scale for Children and Adolescents.
 2. Child- and parent-rating forms that may be clinically useful for following the course of PTSD symptoms in children.
 - a. PTSD Reaction Index.
 - b. Trauma Symptom Checklist for Children.
 - c. Checklist of Child Distress Symptoms—Child and Parent Report Versions.
 - d. Children's Impact of Traumatic Events Scale.
 - e. Child PTSD Symptom Scale.
 - f. Impact of Events Scale (Revised version for adolescents).
- II. Differential diagnosis. Psychiatric disorders that may be comorbid with or misdiagnosed as PTSD, or which PTSD may be misdiagnosed as.
- A. Acute stress disorder.
 - B. Adjustment disorders.
 - C. Panic disorder.
 - D. Generalized anxiety disorder.
 - E. MDD.
 - F. ADHD.
 - G. Substance use disorders.
 - H. Dissociative disorders.
 - I. Conduct disorder.
 - J. Borderline or other personality disorder.
 - K. Schizophrenia or other psychotic disorder.
 - L. Malingering.
 - M. Factitious disorder.
- III. Establish the subtype of PTSD present.
- A. Acute.
 - B. Chronic.
 - C. With delayed onset.

IV. Treatment.

Formulate the treatment plan based on the clinical presentation of the child and to address both PTSD symptoms and other behavioral and emotional problems the child is experiencing. The course of PTSD and its particular symptom pattern in different children is extremely variable. Short-term, long-term, or intermittent treatment may be required. Different levels of care (outpatient, partial or inpatient hospitalization) and modalities (individual, family, group, psychopharmacologic therapy) may be required for different children or for a given child at different points in the course of the disorder.

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

Comprehensive treatment for PTSD is generally multimodal and may include any or all of the following components.

- A. Psychoeducation. Education of the child, parents, teachers, and/or significant others regarding the symptoms, clinical course, treatment options, and prognosis of childhood PTSD.
- B. Individual therapy.
 1. Trauma-focused therapy.
 - a. Exploration and open discussion of the traumatic event; relaxation, desensitization/exposure techniques may be useful.
 - b. Examination and correction of cognitive distortions in attributions about the traumatic event.
 - c. Behavioral interventions to address inappropriate traumatic reenactment (e.g., sexually inappropriate behaviors following sexual abuse; self-injurious, aggressive, and other behavioral difficulties).
 - d. Cognitive-behavioral techniques to help child gain control over intrusive reexperiencing symptoms.
 2. Insight-oriented, interpersonal, and psychodynamic/psychoanalytic therapeutic interventions may be appropriate for treating PTSD in some children.
 3. Therapy to address non-PTSD behavioral and emotional difficulties, in conjunction with trauma-focused interventions.
- C. Family Therapy.
 1. Trauma-focused parental therapy.
 - a. Exploration and resolution of the emotional impact of the traumatic event on the parent.
 - b. Identification and correction of inaccurate parental attributions regarding the traumatic event (e.g., self-blame, blaming the child).
 - c. Identification and implementation of appropriate supportive parenting behaviors and parental reinforcement of therapeutic interventions (e.g., teaching parents to help the child use progressive relaxation techniques).
 - d. Parent training on management of inappropriate child behaviors.
 2. Traditional family therapy with all immediate family members for families with high conflict, harsh discipline, and/or when PTSD symptoms are present in several family members. However, family therapy generally should occur only after the child has received individual intervention to optimize comfortable disclosure of traumatic experiences and trauma-related symptoms. No empirical or clinical consensus is currently available regarding the use of family therapy for children with PTSD.
- D. Group Therapy.
 1. Trauma-focused groups for children of similar developmental levels who have experienced similar traumatic exposure may be beneficial in

AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

- encouraging open discussion of and appropriate attributions regarding the event.
 - 2. School-based group crisis intervention may be particularly useful in disaster situations.
 - 3. Adult psychoeducational groups may be helpful in addressing parental and/or teacher concerns following exposure of groups of children to disaster or community violence situations.
- E. Psychopharmacology.
- 1. Antidepressants (SSRIs, tricyclic antidepressants) may be useful for children exhibiting concurrent major depressive or panic disorder symptoms.
 - 2. Psychostimulants or -adrenergic agonists (e.g., clonidine) may be useful for children exhibiting concurrent ADHD symptoms.
 - 3. Antianxiety medications (benzodiazepines, propranolol) generally have not been used to treat children with PTSD. There is no current clinical consensus that use of these medications is effective for this population.

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