TABLE 18.5. Essentials of Multimodal Treatment of Substance Use Disorders (*continued*)

6. Inpatient rehabilitation may be required for drug dependence. Intensive outpatient services are also indicated for the more seriously impaired youth.
7. School interventions may be required to ensure that the youth is receiving the services required to help motivate and engage him or her in the academic process. School counseling is often indicated.
8. There are medications aimed at treating intoxication states and withdrawal conditions, preventing continued use, and providing narcotic maintenance (e.g., naltrexone, disulfiram, methadone for heroin addiction, and benzodiazepines for withdrawal states). In general, substance abuse treatment tends to minimize psychotropic medication use. To fully assess psychiatric comorbidities, the substance use disorder must have been addressed. However, medication may be indicated for comorbidities.

   ADHD comorbidity: Substance abuse has been demonstrated to be lower when ADHD is effectively treated. Atomoxetine, bupropion, or guanfacine may be indicated first-line. The long-acting stimulant medications (that cannot be crushed and snorted) may also be used carefully in an at-risk population if the medication administration is closely monitored.

   Use other medications as appropriate for targeted symptoms and comorbid conditions.

   In general, it is advised that a youth be observed for several weeks off substances to determine whether another psychiatric condition persists prior to starting a medication.

KEY POINT

One of the best deterrents to substance abuse in teens is open communication at home. Parents who confront their teen if they suspect substance use, let him or her know that they do not condone it, and provide a safe environment in which to disclose his or her use and get help with abstinence tend to have briefer and less severe periods of use and to have better long-term prognosis.

19 Trauma-Related Disorders

Essential Concepts
Screening Questions

- Have you ever had anything really bad happen to you?
- Have you ever been physically hurt by someone?
- Have you been touched in a manner that you didn't like?
- Do you ever have thoughts or images that pop into your mind of something bad that has happened in the past?

All children have to be deceived if they are to grow up without trauma.

—Kazuo Ishiguro

CLINICAL DESCRIPTION

Many children grow up with the scars of physical or sexual abuse, domestic violence, or other traumas. Natural disasters, war, and serious illness with painful procedures are other sources of trauma. It is impossible to grow up without some bad things happening. However, for some children, the horrors they have had to endure have left serious emotional scars.

Posttraumatic stress disorder (PTSD) is an emotional disorder that occurs following an overwhelming and frightening event that threatened serious bodily harm. It results in a re-experiencing of the traumatic event and avoidance of situations that activate traumatic memories. In infants and young children, neglect or maltreatment may result in emotional consequences as well (Table 19.1). Reactive attachment disorder (RAD) is characterized by disturbed and distrusting social relatedness caused by grossly pathogenic care. This disorder results in the child displaying severe inhibition and hypervigilance in social interactions (inhibited type) or

indiscriminate attachment and familiarity with any adult who is nice to them (disinhibited type). Children who are traumatized often are quite reactive and stress sensitive, tend to perceive the world as a dangerous place, and tend to interpret other people's behavior as menacing or aggressive.

TABLE 19.1. DSM-IV-TR Criteria for Posttraumatic Stress Disorder

Trauma exposure	The child has been exposed to an event that involved threatened death or serious injury to him/herself or others. The child's response to the trauma was expressed by disorganized or agitated behavior (or intense fear, helplessness, and horror).
Trauma re-experience (1 or more)	Repetitive play of trauma themes in young children. Recurrent intrusive distressing recollections of the event (images, thoughts, or perceptions) for others. Frightening dreams or recurrent dreams of the event. Trauma-specific reenactment in young children. Acting or feeling like the traumatic event was recurring, e.g., flashbacks. Intense psychological distress or physiological reactivity on exposure to something that resembles the traumatic event.
Trauma avoidance (3 or more)	Efforts to avoid thoughts, feelings, activities that prompt recollection of the trauma. Inability to recall aspects of the trauma. Diminished interest or feelings of detachment. Restricted range of affect. Sense of foreshortened future.
Increased arousal (2 or more)	Difficulty falling or staying asleep. Irritability or outbursts of anger. Difficulty concentrating. Hypervigilance and/or exaggerated startle response.

Adapted from American Psychiatric Association (2000), Diagnostic and Statistical Manual of Mental Disorders, 4th ed. Text revision. Washington, DC. American Psychiatric Association.

CLINICAL VIGNETTE

Sylvia is a 5-year-old girl who was adopted from an orphanage in Europe at the age of 3. Her biological parents were both substance abusers, and Sylvia had lived on the streets with them, exposed to neglect and unknown traumas, until she was 2, at which time she arrived at the orphanage, poorly nourished and "famished." Sylvia quickly made friends at the orphanage, calling all of the women who worked there "Mama." When she was adopted by parents from the United States, she called her new mother "Mama" right away and seemed to attach immediately. Sylvia has been well cared for by her parents and has been in very good day-care when her parents are at work. Difficulties with severe temper tantrums when she does not get her way prompted the day-care provider to suggest referral. When you meet her, Sylvia is a beautiful, blue-eyed girl who immediately takes your hand to walk to your office. She is chatty and has mild articulation errors, but otherwise seems to be developing well. You play together, and she directs the action of dolls in the dollhouse repeatedly being attacked by "burglars". When it gets time for her to leave your office and the toys with which you have been playing, she begins to pout, cry, and refuse to go with her mother. You are concerned about Sylvia's trauma history and her symptoms of RAD, disinhibited type.

KEY POINT

PTSD is only one of several diagnosable psychiatric disorders that may emerge from trauma. Depression, other anxiety disorders, substance abuse, conduct problems, and (in infancy) reactive attachment disorder are others. Screen for these, as well.

KEY POINT

Exposure to violence during childhood often negatively impacts development in multiple domains. Be attentive to neurophysiological signs (stress response, startle and hyperarousal reactions, dissociation), altered cognitions (feeling vulnerable, sense of foreshortened future, lowered self-confidence, and guilt), and

emotional development (core identity, view of the world, social relationships). All aspects of the child's development may be impacted.

Epidemiology

Trauma is a common occurrence in our communities. The National Center on Child Abuse and Neglect reported in 2000 that over 3 million children per year are referred to child protective services for abuse or serious neglect. One-third of these cases are substantiated and half of these (over half a million) are so severe that the children are removed from their homes. Community violence, domestic violence, natural disasters, accidents, and other events may be so severe as to leave permanent scars on the child's developing personality. In inner cities, children may be exposed to shootings or stabbings (up to 40% according to Schwab-Stone). September 11th was a national trauma, which affected children in the vicinity much more intensely.

It appears that children are more sensitive to the effects of trauma than adults and consequently may exhibit higher rates of PTSD development. Community-based studies reveal a lifetime prevalence for PTSD of approximately 8% of the adult population in the United States.

Etiology and Risk Factors

The etiology of PTSD requires an overwhelming stressful event. However, not all individuals who experience severe trauma develop a disorder. Clearly, there is a complex interplay between the environmental event, the person's premorbid psychological health and psychosocial support network, and a neurobiological cascade that characterizes the pathogenesis.

One important factor is whether the trauma was a single event or multiple events. Children's symptoms also vary as a function of age and developmental phase. Single-incident trauma can have a profound and long-lasting effect. Half of victims generally recover within 3 months, but many remain ill for a year or more, with symptoms reemerging following a subsequent trauma or life stress. Complex trauma consists of multiple exposures to stressful events over time. There is an estimated 37.5% lifetime prevalence for PTSD in victims of substantiated childhood abuse and neglect. Chronic trauma adversely affects personality development. Symptoms of chronic trauma are impairment of affect regulation, chronic destructive behavior to self and others, dissociation, and problems with attention and somatization. The individual may suffer from brief psychotic symptoms.

Early life trauma affects multiple neurobiological functions. Dysregulation of the hypothalamic-pituitary-adrenal (HPA) axis and the secretion of the stress hormone cortisol are noted in children and adults. Maltreated children have shown overall smaller cerebral volumes, with normal hippocampal size, in neuroimaging studies. Multiple neurotransmitters have been implicated in the traumatic stress response as well. It is clear that severe stress leads to global dysregulation (neuroendocrine, biological, psychological, and developmental) and the high potential for longer-term emotional and behavioral sequellae.

Assessment

When assessing the child or adolescent for whom you suspect abuse, neglect, or there is a known trauma, it is important to ensure an appropriate medical workup and to consider comorbidities, which tend to be common (Table 19.2).

TABLE 19.2. Essentials for Assessment of Trauma in Children

1. A comprehensive physical examination, with screening for physical injury or sexual abuse, as appropriate.
2. Historic data should be collected from multiple sources regarding the trauma (or suspected trauma) and the child's symptoms.
3. Forming a rapport and providing a safe environment in which to assess the child are critical.
4. Ask direct questions about the trauma of the traumatized children.
5. If a child is reluctant to talk directly about the trauma (or developmentally would not be expected to do so), help the child communicate his or her inner life experience through nonverbal methods, e.g., play or artwork.
6. Assess family and home situation. Is it a safe environment for the child? Are protective services involved (or do they need to be)? Was the entire family traumatized? What supports does the family require to provide for the traumatized child?
7. Assess for psychiatric comorbidity.
8. Structured rating instruments may be helpful as one component of a comprehensive evaluation (e.g., Trauma Symptom Checklist for Children [TSCC]; Child Posttraumatic Stress Reaction Index [CPTS-RI]).

CLINICAL VIGNETTE

This is an excerpt from an interview of a 6-year-old girl who was in a car accident in which her babysitter, the driver, died. She is in the hospital a week later being treated for a broken leg and cuts. She has been tearful and irritable, and eating poorly. You are a consultant asked to see her around "processing the trauma." You met her one other time, and are back to see her.

Interviewer:	*You were in a very bad accident. Can you tell me about it?*
Sarah:	*It wasn't an accident!*
Interviewer:	*Tell me what you mean.*
Sarah:	*I was mad.*
Interviewer:	*You were mad?*
Sarah:	*Yes! I wanted to go to the store, and she said we had to go home.*
Interviewer:	*And then?*
Sarah:	*I think she'd had it with me.*
Interviewer:	*How do you mean?*
Sarah:	*She said, "No, Sarah. We need to get home today to practice the piano before your lesson." I think she just didn't want to deal with me anymore.*
Interviewer:	*Are you thinking you caused the crash?*
Sarah:	*How else could it have happened?*

Sarah is presenting with classical survivor guilt. She was attempting to resolve in her own mind how this horrible accident could have happened. She has been living with the shame and guilt that she caused the accident, and that her babysitter wanted to "get away" from her. When that was finally talked out, over a period of weeks, her severe dysphoria and irritability began to subside.

TIP

A word about mandated reporting. All physicians, teachers, and mental health providers are mandated reporters. If there is reason to suspect abuse or neglect, you are mandated to inform your state's protective service agency. There is a hotline and a form to be filled out. If you are treating a child who informs you of being hit with a belt, touched inappropriately, etc., you must file. Unless contraindicated for a specific reason, rapport may be maintained if you talk with the parents or guardians about why you are concerned and inform them that you will be filing a report. You are modeling honesty, openness, and your dedication to the safety of the child.

Treatment

Although much remains to be done, there is an increasing literature on the treatment of trauma in children. A "prevention-intervention" model incorporates triage for children exposed to violence, support and strengthening of coping skills to prepare for anticipated trauma and grief responses, treatment of other disorders that may develop or be exacerbated in the context of PTSD, and treatment of acute PTSD. All humans have the basic need to feel connected and share with others. Providing the time and a format for the child to put experience into words and thus share traumatic events with others in a safe and secure manner can be a potent early intervention. A well-planned treatment typically includes an admixture of cognitive-behavioral, family-supportive, and psychodynamically informed psychotherapy in several phases: initial or preventive therapy, long-term therapy, and pulsed intervention (Tables 19.3 and 19.4). Central to almost all treatment strategies is the emphasis on re-exposing the individual to traumatic cues under safe conditions, and incorporative mastery elements in a structured and supportive manner.

TIP

Trauma can have negative effects on personality development. Early detection, intervention, and a plan to ensure that the child is safe and the risk of repeated trauma is minimized will most effectively improve prognosis. One of the most satisfying aspects of child psychiatry is the opportunity to prevent disability—treatment of trauma is one of the most important and promising of those opportunities.

TABLE 19.3. Essentials for Treatment of Traumatized Children

1. Initial intervention—debriefing. This is an opportunity for children to share their experiences in a safe and nurturing setting. Critical incident stress debriefing, psychological first aid, or just the opportunity for children to clarify and talk about (or draw or play about) their traumatic experience is the initial intervention. Triage children who display serious symptoms for more intensive treatment.
2. Psychoeducation of parents and children about the components of PTSD and the specific rationale for therapy is critical.
3. The treatment provided may depend on whether there was a shared trauma (such as the 9/11 attacks) or an individual one (such as being a victim of sexual abuse).
4. Psychosocial therapies
   - Group cognitive-behavioral treatment for PTSD (such as that formulated by Amaya-Jackson and colleagues)
   - Trauma-focused cognitive-behavioral therapy (TF-CBT)
   - Brief therapy with controlled exposure to traumatic cues and "working through"
   - Family therapy—to help the family learn coping strategies, increase communication, and help them meet the child's needs adequately
   - Group therapy and shared working through
   - Long-term and intermittent supportive therapy—continuity with the therapist can be very helpful in ongoing working through issues of trauma in a longer-term or intermittent or "pulsed" therapy manner.
5. School interventions may be required to ensure that the youth is receiving the services required to help him or her feel safe and secure in school. School counseling is often indicated.
6. Medications—as an adjunct to treat overwhelming anxiety, facilitate functioning, and help the child to be more amenable to psychotherapy. The decision to use medication is based on target symptoms, their severity, and the degree of disability they cause. Table 19.4 gives the medications that may be effective in the treatment of PTSD.

TABLE 19.4. Medications Used in the Treatment of Posttraumatic Stress Disorder

Medication Category	*Examples Commonly Used in Pediatric Populations*	*Target Symptoms/Comments*
Serotonergic agents	Fluoxetine, sertraline, citalopram, nefazodone	Reported to be effective in treating hyperarousal, agitation, and insomnia. Considered a first-line treatment for PTSD.
Alpha-2a agonists	Clonidine, guanfacine	Reported to be effective in treating hyperarousal, agitation, insomnia, and nightmares. Considered a first-line treatment for PTSD.
Beta-blocker	Propranolol	Shown effective for treating target symptoms of hyperarousal and agitation. Considered second line because of problems with side effects, dizziness.
Tricyclic antidepressants	Imipramine, desipramine, nortriptyline	Good for sleep dysregulation and associated enuresis. Considered second line because of the cardiotoxicity side-effect profile.

(Continued)

TABLE 19.4. Medications Used in the Treatment of Posttraumatic Stress Disorder (*continued*)

Medication Category	*Examples Commonly Used in Pediatric Populations*	*Target Symptoms/Comments*
Benzodiazepines	Lorazepam, diazepam, clonazepam	Brief use for insomnia. Probably underutilized in children because of worries of abuse or dependence. Short-term use would minimize this risk. Watch for disinhibition. Considered second line by many.
Mood stabilizers	Valproate, carbamazepine, oxcarbazepine	Carbamazepine, shown to be effective in decreasing flashbacks, nightmares, intrusive memories, and sleep dysregulation in children and adults. Considered second line by some because of side-effect profile and the need for blood testing.
Antipsychotics	Risperidone, olanzapine, quetiapine, aripiprazole, ziprasidone, haloperidol	Should be reserved for youth with associated psychotic symptoms, or extreme aggression or self-injurious behaviors.

Reprinted with permission from Cheng & Meyers: *Child and Adolescent Psychiatry: The Essentials*, Lippincott Williams & Wilkins, 2005.

20 Adjustment Disorders

Essential Concepts
Screening Questions

- Has there been something that happened recently that has caused you to feel particularly upset?
- What was it? When did it happen?
- What type of response have you had to that event?

Every new adjustment is a crisis in self-esteem

—Eric Hoffer

CLINICAL DESCRIPTION

Life is full of events that cause upset and stress. At times a particular stress may precipitate a significant decline in ability to cope. When this happens, a child, adolescent, or adult may experience extreme distress, depression, anxiety, or behavioral symptoms as a consequence. We diagnose an adjustment disorder when the symptoms are not specifically related to bereavement and do not meet criteria for another Axis I or II disorder, but have resulted in significant impairment in functioning within 3 months of the stressor. In children and adolescents, divorce or separation of parents, a move to a new school or home, or being teased at school may result in a distress reaction. When the reaction is excessive and interferes with daily life tasks, it becomes an adjustment disorder.

CLINICAL VIGNETTE

Brittany is a 13-year-old seventh-grade girl presenting with symptoms of anxiety, crying spells, and recent shoplifting, which was quite uncharacteristic, as she was described by her parents as an honor student who had been very well behaved. Her parents have been arguing a great deal, and last month announced to Brittany and her 7-year-old sister that