Recognizing and Referring Children with Posttraumatic Stress Disorder: Guidelines for Pediatric Providers

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Education Gaps

Posttraumatic stress disorder (PTSD) affects approximately 4% of US children and teens and can severely impact the quality of social, academic, and personal welfare aspects of a child or adolescent and can persist into adulthood. Yet, 1 study indicated that only 18% of pediatricians surveyed felt that they had adequate knowledge of pediatric PTSD, and most (72%) reported that greater collaboration with mental health providers would improve their assessment of PTSD. (1) Health-care providers who treat pediatric populations should be aware of the magnitude of this problem and be able to screen for and refer children and teens with PTSD for specific treatments. (1)

1. Banh MK, Saxe G, Mangione T, Horton NJ. Physician-reported practice of managing childhood posttraumatic stress in pediatric primary care. *Gen Hosp Psychiatry*. 2008;30(6):536–545

Objectives

After completing this article, readers should be able to:

1. Identify and refer children affected by trauma for appropriate evaluation and evidence-based treatment.
2. Summarize the evidence for treatment approaches, including psychotherapies.
3. Understand the importance of pediatric providers knowing about what treatments have been supported for treating pediatric posttraumatic stress disorder.

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ABBREVIATIONS

DSM-V	*Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*
PTSD	posttraumatic stress disorder
SSRI	selective serotonin reuptake inhibitors

CASE EXAMPLE 1

At a routine health supervision visit, a mother expresses concern that her 3-year-old daughter has "gone back to the terrible twos." The mother says that her daughter is having intense tantrums that can last hours, is having increased difficulty separating from her, is taking much longer than usual to get to sleep at night, is often coming into her mother's room in the middle of the night, and has wet her pants on several occasions although she was previously toilet

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trained. The mother says that these behaviors began shortly after an armed robbery in their home a few months ago. The mother does not know whether there is any connection because she believes that her daughter is too young to understand what was going on. The mother admits that she has also had trouble sleeping and has felt "on guard." She mentions that the event may have been hard on her teenage son as well because he is staying in his room more, is spending less time with friends than usual, and has seemed touchy and irritable. *Could these be symptoms of PTSD? What recommendations could be given to this mother? How would recommendations differ for a 3-year-old and a teenager?*

PREVALENCE AND OUTCOMES OF CHILDHOOD TRAUMA

Exposure to trauma is a major public health concern that affects a vast number of children growing up in the United States. Childhood trauma encompasses a wide range of experiences that threaten the life, safety, or physical well-being of a child or loved one. Such events include child abuse and neglect, domestic violence, community violence, murder or suicide of a family member, severe accidents, and natural and manmade disasters. Epidemiologic studies estimate that as many as 70% of US children and adolescents experience some form of trauma. (1) In 2013, 679,000 children were substantiated victims of child abuse or neglect, and more than 6 million children were referred to child welfare agencies for suspected abuse or neglect. (2) A nationally representative study reported that 60% of youth aged 0 to 17 years were victims or witnesses of interpersonal violence in the preceding year. (3) This study found that 26% of youth had experienced violence in their homes. (4) Approximately 1 in 4 women and 1 in 7 men report childhood experiences of sexual abuse. (4) Rates of childhood trauma are even higher in low-income urban communities, with studies of high-risk urban youth reporting prevalences of more than 90%. (5)

In addition to well-known emotional and behavioral effects of trauma, a growing body of evidence indicates that exposure to trauma in childhood increases the risk of numerous long-term physical health problems. Medical correlates of childhood trauma include common problems such as asthma, allergies, headaches, and gastrointestinal problems, as well as many of the leading causes of death in adulthood (eg, heart disease, cancer, lung disease, kidney disease, obesity) and related health risk behaviors. (6) A recent study using biological measures found that after adjusting for age, sex, and race, court-substantiated child maltreatment predicted above-normal hemoglobin levels, lower albumin levels, poor peak airflow, and vision problems in middle-aged adults. (7) Childhood trauma is also associated with negative emotional and behavioral outcomes, including interpersonal difficulties, academic problems, delinquency, substance use, risky sexual behaviors, anxiety, depression, and suicide attempts.

Medical providers are often the first line of response to children's exposure to trauma and are in a unique position to prevent or reduce long-term consequences. (8) Although well-established treatments are available, children exposed to trauma often do not receive these treatments. Barriers to seeking help include limited access to mental health services, few providers with experience treating trauma in many communities, and the stigma associated with mental health. In addition, parents may not be aware of symptoms associated with trauma or the profound effects that trauma can have on children of all ages. Pediatric and adolescent medicine doctors are in a unique position to increase access to care because they are often trusted adults with whom youth feel safe discussing traumatic experiences that they are afraid or ashamed to disclose, such as child abuse or domestic violence. (8) Moreover, pediatric care settings are well suited for providing education, monitoring, and referrals for trauma-exposed children and their families.

POSTTRAUMATIC STRESS DISORDER

Although children may evidence a range of reactions to trauma, posttraumatic stress disorder (PTSD) represents the most direct and systematic pattern of symptoms resulting from traumatic exposure. This impairing condition involves persistent distress or fear, avoidance of traumatic memories or reminders, and significant alterations in mood, thinking, and behavior. Also, PTSD is an important predictor of long-term mental and physical health outcomes. However, not all children develop PTSD, and many are able to recover from a traumatic event with few consequences. The reported numbers of trauma-exposed children who develop PTSD vary widely across studies of different populations, types of trauma, and proximity or extent of impact. For example, studies of children affected by disasters have reported rates as low as 10% in New York school-age children after the World Trade Center attacks to as high as 86% in children in South Florida after Hurricane Andrew. (9) Thus, all children exposed to traumatic events warrant screening for trauma-related symptoms and impairment.

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DSM-V CRITERIA FOR PTSD

Released in 2013, the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)* made substantial changes to the diagnostic criteria for PTSD. First, recognizing the broad range of symptoms resulting from trauma, PTSD has been moved from the section of "anxiety disorders" to a new category of "trauma and stress-related disorders," including acute stress disorder and the adjustment disorders. Second, the definition of events that qualify as traumas has been expanded to explicitly include indirect or vicarious exposure, such as hearing about the violent death of a close relative or friend or repeated exposure to aversive details through professional duties (eg, first responders). Third, the requirement that a trauma results in reported or observed fear, helplessness, or horror has been removed because this criterion was found to be difficult to assess and unreliable in predicting significant traumatic reactions or impairment.

To qualify for a diagnosis of PTSD, symptoms in each of 4 categories must be present for at least 1 month, although onset can occur at any time after experiencing a trauma. Symptoms must also cause significant distress and/or impairment of functioning. The four symptom clusters are: 1) intrusive thoughts, memories, or emotions, which include dreams and flashbacks related to the trauma; 2) avoidance of stimuli associated with the trauma; 3) negative thoughts, beliefs, or emotions associated with the trauma; and 4) alterations in arousal and reactivity, including angry outbursts, self-destructive behaviors, hypervigilance and exaggerated startle response, concentration difficulties, and sleep disturbance. (10) Acute stress disorder is diagnosed when symptoms are present for 3 days to 1 month after a trauma and cause significant impairment. It should also be noted that the *DSM-V* has added a preschool subtype of PTSD for children 6 years and younger. In addition, many children who do not meet the full criteria for the *DSM-V* diagnosis may present with significant and impairing subthreshold symptoms and, thus, are in need of treatment.

ADDITIONAL SIGNS AND SYMPTOMS OF TRAUMA IN CHILDREN

Although the *DSM-V* provides an expanded set of criteria for PTSD that better captures the broad range of symptoms that can result from trauma, including a modified set of criteria for young children, additional behavioral changes might indicate trauma-related impairment and warrant referral for a specialized evaluation. Specific reactions to trauma (including PTSD symptoms) often look different at different ages due to developmental norms and changes. The effects of trauma can present as regression in, or disruption of, key developmental tasks at a particular age. In infants, trauma could result in difficulties with trust and reliance on caregivers, constant crying and inability to be soothed, sleep and feeding problems, and regression in previously attained language and motor skills. Toddlers may have difficulty separating from parents, become clingy with or avoidant of caregivers, exhibit overactive or underactive behavior, and develop problems sleeping, eating, or toileting. They may also show changes in mood such as increased irritability, inconsolable crying, severe aggression, or intense fear. Similarly, in preschool children, trauma reactions can manifest as regression in previously acquired language, cognitive, and motor skills (eg, babyish talk or behavior); toileting difficulties; and temper tantrums. Preschool children may also exhibit difficulties with peers and are typically the youngest to report nightmares related to the trauma or other themes. In school-age children, besides the core symptoms of PTSD, traumatic reactions often include declining grades, overdependence on caregivers or other adults, generalized worries and fears, depression, inattention, and conduct problems. Adolescents are at particular risk for eating disorders, pain or other somatic problems, low self-esteem, depression, interpersonal difficulties, risky sexual behaviors, delinquent behaviors, and substance problems. Considering the effects of trauma in this developmental perspective can help identify children and adolescents who may not clearly fit the *DSM* criteria for PTSD but who are nonetheless experiencing the effects of a traumatic experience.

It is also important to consider that the effects of trauma can mimic other behavioral health problems. Because of this, youth are often misdiagnosed and do not receive appropriate trauma-focused treatment. For example, regression in developmental milestones in a young child exposed to trauma could be mistaken for a developmental delay or autism spectrum disorder if a thorough developmental history and a trauma assessment are not conducted. As another example, difficulties with concentration and attention are typical symptoms of trauma in school-age and adolescent youth but could be misdiagnosed as attention-deficit/hyperactivity disorder. However, the first-line pharmacologic treatments for attention-deficit/hyperactivity disorder (psychostimulants) can potentially exacerbate trauma-related symptoms and even lead to hallucinations. Moreover, if the trauma goes unaddressed, initial symptoms can develop into long-lasting mental and physical health problems.

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PREVENTIVE INTERVENTIONS

Factors that predict or buffer against PTSD are not entirely understood. However, negative outcomes in children, including PTSD, tend to be exacerbated when caregivers are involved in or affected by the trauma (eg, domestic violence, death of a parent, child abuse), the trauma results in disruption or loss of possessions (eg, a house fire), and the trauma is chronic or the threat to safety is ongoing (eg, child abuse or neglect, community violence). Thus, interventions in the aftermath of trauma can reduce the likelihood of PTSD and other important problems by taking these factors into account. First, involving and supporting caregivers is critical to enhancing children's recovery from a trauma. Parents benefit from knowing how to talk to and support their children. Parents may also be in need of treatment to address their own reactions to a traumatic event. If the trauma involves the loss of a parent, efforts to support the role of an existing caregiver are crucial. Second, minimizing disruption to a child's life can reduce the impact of the trauma. Parents may wish to move to a new home or neighborhood after a traumatic event, but this may not always be the most helpful for a child's recovery. Parents may also want to keep children home from school. However, a return to normal routines, including school, can support recovery. In cases of child abuse and neglect, child welfare agencies may remove children from their homes and caregivers to ensure safety. Unfortunately, this kind of disruption can exacerbate traumatic reactions, and children are too often revictimized in foster and group homes. Finally, immediate responses to trauma require preventing ongoing or recurrent trauma. However, as noted previously herein, ensuring the safety and security of a child and family sometimes results in disruption, and, therefore, these goals should be balanced to maximize a child's safety while reducing disruption as much as possible. Additional protective factors for children exposed to trauma include a supportive school environment where the child feels connected and engaged, community resources, supportive peer relationships, and child characteristics such as self-esteem, coping skills, self-efficacy, interpersonal skills, and academic success. On the other hand, children with preexisting histories of depression or anxiety, previous trauma, and poor coping skills (eg, rumination about negative events) are more vulnerable to developing PTSD.

SCREENING MEASURES

A pediatrician can routinely screen for traumatic exposure by asking a simple question at all health supervision visits: "Since the last time I saw you, has anything really scary or upsetting happened to you or your family?" Parents of young children can be asked an analogous question, "Since the last time I saw your child, has anything really scary or upsetting happened to your child or anyone in your family?" (8) Responses to this question can be used to determine whether the child has experienced a trauma as defined previously herein. Many children and parents may also report nontraumatic stressors, such as the loss of a pet or a friend moving away. Validated screening measures are also available, such as the 15-item Traumatic Events Screening Inventory and a parent-report version adapted for young children. (11)

To assess for the presence of PTSD in children who have experienced a traumatic event, a provider can administer a brief symptom screen. The Child Stress Disorders Checklist–Short Form is a 4-item measure that has demonstrated reliability in screening for *DSM-IV* PTSD symptom clusters. (12) An abbreviated 9-item version of the UCLA PTSD Reaction Index is also available for screening *DSM-IV* symptoms. However, as of the writing of this article, brief screeners have not yet been adapted to correspond to the expanded *DSM-V* criteria. The full UCLA PTSD Reaction Index has been revised for *DSM-V*. This measure assesses preliminary diagnostic information and frequency of symptoms in children older than 6 years with 27 questions assessing core symptoms of PTSD (eg, "I feel like I am back at the time when the bad thing happened, like it's happening all over again," "I try to stay away from people, places, or things that remind me about what happened") and 4 additional items assessing dissociative symptoms (eg, "I feel not connected to my body, like I'm not really there inside"). (13) Caregiver reports are most appropriate for young children, such as the parent-report version of the UCLA PTSD Index or the PTSD Symptoms in Preschool Children scale. (14) Information about additional screening and assessment measures is available through the National Child Traumatic Stress Network (http://www.nctsn.org/resources/online-research/measures-review) and the National Center for PTSD (http://www.ptsd.va.gov).

EVIDENCE-BASED TREATMENTS FOR PTSD IN CHILDREN

Numerous treatments have been developed for treating PTSD in children and adolescents, and many of these treatments have been supported with empirical evidence (see http://www.nctsn.org/resources/topics/treatments-that-work/promising-practices). The following discussion highlights a selection of treatments that have received substantial research support from multiple clinical trials

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or that are promising approaches for specialized populations of trauma-exposed youth. Trauma-focused interventions for children and adolescents are most effective in treating the core symptoms of PTSD and tend to share several common elements: 1) parental involvement, ranging from extensive for young children to minimal for adolescents; 2) coping skills training to manage traumatic reactions; 3) mastery of avoided situations or activities associated with the trauma; and 4) structured retelling of the trauma through creation of a narrative in collaboration with a specially trained therapist. Exposure to traumatic reminders, both in vivo and through creation of the trauma narrative, is encouraged to desensitize children to reminders of the trauma, contextualize the trauma as 1 past event in the child's life, and help children cope with emotions and thoughts linked to traumatic memories. The recommended treatments described later herein all combine a structured therapist-guided approach in conjunction with a collaborative relationship with the child and family.

Early Childhood

Effective interventions with young children focus on the parent-child dyad rather than treating children individually. Child-Parent Psychotherapy (CPP) is designated a well-supported and efficacious treatment for PTSD and other symptoms related to trauma in children 6 years and younger (including infants and toddlers). Drawing on psychodynamic, attachment, trauma, cognitive behavioral, and social learning frameworks, CPP addresses children's reactions to trauma though the parent-child relationship. Children are seen with a primary caregiver (generally mothers) in sessions that focus on affect regulation, changing maladaptive behaviors, supporting developmentally appropriate interactions and activities, and guiding the parent and child in creating a joint trauma narrative. Child-Parent Psychotherapy has been supported in 3 randomized controlled trials with ethnically and racially diverse families, primarily of low socioeconomic status, affected by child maltreatment and domestic violence. Follow-up has indicated that reductions in child and maternal mental health symptoms are retained over 6 months. (15)

Parent-Child Interaction Therapy (PCIT) is another intervention that focuses on the parent-child relationship to reduce behavioral problems in children. (16) It is a highly structured treatment in which the therapist coaches the caregiver during play interactions with the child through use of a 1-way mirror and earbuds. The caregiver learns skills for responding to the child, implementing effective discipline, and increasing compliant behavior. A well-established treatment for oppositional and aggressive behavior problems in children, PCIT has received more recent support as a promising treatment for reducing behavior problems in abused and neglected children. It has also been found to reduce caregiver stress and repeated incidences of maltreatment by parents who have abused their children.

School-Age Children

Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) has received the most empirical support for the treatment of PTSD in culturally diverse school-aged children and adolescents affected by a range of traumatic experiences, including sexual and physical abuse, domestic violence, traumatic grief, disasters, and terrorism. (17)(18) Numerous clinical trials have supported the efficacy of this treatment in reducing PTSD and other emotional and behavioral symptoms related to trauma in children and adolescents of diverse racial, ethic, socioeconomic, and cultural backgrounds. Trauma-Focused CBT is a stepwise approach that involves psychoeducation about the effects of trauma, teaching children skills for coping with traumatic experiences and symptoms, developing safety skills, gaining exposure to and processing of the traumatic experience through construction of a narrative, and gaining exposure and habituation to traumatic reminders. Trauma-Focused CBT also involves psychoeducation and support for parents and conjoint parent-child sessions during which the child is able to share her or his trauma narrative. Although it follows a manualized sequence of steps, activities within each step can be flexibly tailored to the needs and developmental stage of the child. For example, in young children the trauma narrative can be created through use of puppets or drawing, whereas an older child typically creates a written narrative.

Cue-centered treatment (CCT) (19) was developed to address PTSD and other trauma-related symptoms in children who have experienced long-term, ongoing trauma and other adversities. It recognizes that children with multiple traumatic experiences (or complex trauma) may gain limited benefits from processing a focal trauma. This treatment focuses on helping the child to become his or her own agent of change through increased awareness of trauma-related experiences and symptoms; development of skills for coping with trauma symptoms; and increased insight into relationships among traumatic experiences, emotional reactions, and behavioral responses. Although CCT remains an emerging treatment, the first randomized controlled trial with 65 youth with histories of interpersonal violence exposure found that compared with a waitlist control condition, CCT was associated with a greater reduction in PTSD and anxiety symptoms, and improvement in overall functioning. These gains were maintained over a 3-month period after treatment. (19)

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Cognitive Behavioral Interventions for Trauma in Schools (CBITS) is a promising approach to addressing trauma in the school setting using a group treatment model with elements similar to TF-CBT. Because the program is administered in schools, teacher education about the effects of trauma is included, and there is a parent psychoeducation component. Advantages of CBITS are that school-based treatment can be made available to children who may not otherwise have access to treatment, and participating in a group at school may reduce the stigma associated with obtaining mental health services outside the school environment. In addition, peer support and modeling is facilitated through the group format. The most significant disadvantage is that treatment cannot be tailored to individual children's symptoms, and certain kinds of trauma (eg, sexual abuse) may not be appropriate for a school-based group format. Cognitive Behavioral Interventions for Trauma in Schools is most suited for addressing PTSD and other symptoms associated with exposure to domestic or community violence in underserved youth who are unlikely to access clinic-based mental health services. It was developed through a collaborative partnership with schools and community members (including parents) and has been supported in randomized clinical trials and a quasi-experimental trial. These studies found reductions in PTSD and depressive symptoms in elementary and middle school children participating in the treatment compared with a control group. The developers report success in implementing CBITS in numerous communities with students from diverse racial, ethnic, and socioeconomic backgrounds. (20) They have now developed an adaptation that can be delivered by non–mental health–trained school staff. A small randomized trial indicated modest improvements in trauma-related symptoms.

CASE EXAMPLE 2

Before a camp physical, the parents of a 14-year-old girl tell her pediatrician that she has "been especially hard to connect with" in the past several weeks. They say that she has a new group of friends, has felt pressure to "fit in," and is struggling with her body image. The parents say that these behaviors began shortly after a party last month, where several parents described a house with "no parental supervision, and where several kids left the party looking sick or high." They worry that she may have been date raped because of specific references in online postings and that she becomes very tearful at the mention of a boy in school with whom she went to the party. The teen girl admits to having trouble sleeping and to feeling "empty and hopeless." She mentions that she has even thought about suicide, but "that would be a cop-out." *Could these be symptoms of PTSD? What recommendations could be given to this patient and these parents?*

Adolescents

In addition to the treatments described previously herein for school-age children, which are also appropriate for teens, 2 additional interventions modified from adult treatments may be appropriate for adolescents affected by trauma. Prolonged Exposure Therapy for Adolescents (PE-A) has been adapted from a well-established adult protocol to meet the developmental needs of teens (eg, increased case management and relapse prevention). It includes psychoeducation about the effects of trauma, training in breathing techniques to manage distress associated with traumatic reminders, exposure to avoided situations or activities associated with the trauma, and repeated retelling of the traumatic memory during sessions. Although parent participation in psychoeducational sessions and in supporting in vivo exposure is encouraged, it is not essential for treatment success. Two randomized controlled trials have found that PE-A resulted in a greater reduction in PTSD and depressive symptoms compared with a control treatment in adolescent girls with PTSD related to sexual abuse (21) and in adolescents with PTSD related to various single-event traumas. (22) Prolonged Exposure Therapy for Adolescents is likely most appropriate for older teens who have experienced a discrete or single-event trauma, such as a sexual assault or a motor vehicle accident.

Dialectical Behavior Therapy (DBT) has been adapted for use with teen populations from a well-established adult treatment for suicidal and other self-harming behaviors and, thus, may be a beneficial approach for adolescents exhibiting these kinds of symptoms in response to trauma. Dialectical Behavior Therapy combines cognitive and behavioral therapy with Eastern practices, such as mindfulness, to help teens develop skills for coping with intense, or dysregulated, emotions in healthy ways and to reduce self-harming behaviors. An intensive treatment, DBT for adolescents involves individual therapy, a 12-week skills group including parents or other family members, telephone coaching between sessions, and a consultation group for therapists. Although limited research has been conducted with adolescents, 1 randomized clinical trial found greater decreases in self-harm, suicidal ideation, and depression in adolescents participating in DBT compared with a control treatment. (23) Self-harming behaviors and suicidal ideation are often associated with trauma in teens, and 1 small study with adolescent girls reported a significant reduction in trauma-related symptoms after completion of DBT. (24)

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Other Treatments that Have Limited Support or Are Not Recommended

Many treatments provided to traumatized children have not been adequately studied or have found been to be harmful. For example, ambiguous results have been found for psychological debriefing during which children share traumatic experiences and reactions and receive empathetic support and psychoeducation in the immediate aftermath of a trauma. Unstructured, child-directed play therapies have also been found to have limited benefits compared with structured approaches such as those described previously herein. At the other end of the spectrum, restrictive rebirthing or holding techniques that are sometimes believed to relieve symptoms of trauma are found to be harmful and can result in injury or death.

Psychopharmacologic Treatments

Because pediatric PTSD is developmentally distinct from adult PTSD, (8)(25)(26) evidence for pharmacotherapy is limited for the core symptoms of PTSD, and treatment should be reserved for cases in which symptoms are so severe that a child cannot participate in psychotherapy or other forms of therapeutic support or when impairing comorbid symptoms are present and severe enough to be a focus of treatment. (25) "In these instances, pharmacotherapy targets specific symptoms affecting the child with PTSD (e.g., disrupted sleep, nightmares, hypervigilance, new-onset generalized anxiety, *etc*.). Since high quality drug trials in pediatric PTSD are sparse, pharmacologic agent selection should be guided by the following factors: 1) existing reports in the literature, 2) known tolerability for other pediatric indications or 'off label' uses, and 3) the agent's mechanism of action and the neurobiological theory for the symptoms expressed. To a lesser extent, cautious extrapolation of adult PTSD evidence may be considered, as long as side effects are monitored for closely." (25) The reader is referred to thorough reviews (see references) to learn more about how medication management can be used in conjunction with evidence-based psychotherapy in cases in which prolonged and severe symptoms or conditions (eg, depression, anxiety, psychosis) warrant pharmacotherapeutic intervention. (8)(25)(26) Emerging evidence exists for a variety of agents, including tricyclic antidepressants, selective serotonin reuptake inhibitors, α-adrenergic agents, prazosin, propranolol, second-generation antipsychotics (risperidone, quetiapine), and mood-stabilizing agents (carbamazepine, divalproex). (26) At of the time of this writing, however, all medications listed previously herein are still considered off label for pediatric patients. And, importantly, these agents should be used primarily as an adjunct to high-quality psychotherapy by skilled providers.

Traumatized children and teens are especially overrepresented in the child welfare and juvenile justice systems. Cohen and colleagues (27) advise practitioners in the field to promote integrated and trauma-informed systems of care by being attuned to "early identification and appropriate referral to trauma-focused treatment via 'any available door' through which youth enter child-serving systems. This includes the educational, primary care, child welfare, juvenile justice, or mental health systems, … especially as children move from one system to another."

CONCLUSION

Although many children and adolescents are resilient after traumatic experiences, others develop a variety of emotional and behavioral symptoms that can be severe and long-lasting.

Pediatric providers are in a unique position to identify children and adolescents exposed to trauma and to facilitate prevention and treatment of PTSD and other trauma-related conditions. Because of their role as trusted adults and their routine contact with children and families, pediatricians may be the first line of response for many traumatized children. Thus, screening for traumatic exposures and having access to tools for screening symptoms of PTSD can be crucial components of routine care. For children at risk or who are exhibiting major trauma-related symptoms, recommended treatments generally use a structured skills-based approach, involve parents, and support children in developing coping strategies and mastery of traumatic triggers. Primary care providers may begin the process of recovery with education about the effects of trauma, monitoring of symptoms, support for families, and referral for specialized services. To facilitate referrals, practitioners should become familiar with trauma treatment options that meet the criteria described previously herein and are available in the local community. Leaders in the field of pediatric PTSD have advocated the following for all child-serving professionals: 1) early and effective identification of trauma and its impact in pediatric populations; 2) evidence-based, trauma-focused psychotherapeutic interventions; 3) evidence-based psychopharmacologic treatments for traumatized children (when they become available); 4) integrated, trauma-informed systems of care; 5) collaboration between primary care and child and adolescent psychiatry. (Crucial to the role of primary care is to know *when* to refer and *what sort of treatment* to refer to. Recent literature has underscored the need for dissemination and availability of psychotherapies that work for these vulnerable populations.); and 6) training the next generation of pediatric providers about each of the previous items. (27)(28)

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Summary

1. Strong evidence indicates that a large number of children and adolescents in the United States (as many as 70%) experience trauma, with significant effects across psychological, emotional, and behavioral functioning. (1) Pediatric primary care providers are well positioned to intervene to support youth affected by trauma and to refer them to evidence-based treatments.
2. Professional consensus supports the use of simple screening questions to ask about trauma during routine pediatric appointments, (8) and use of well-established measures of trauma exposure and symptoms, such as the UCLA PTSD Reaction Index, are also available. (13)
3. Strong research evidence and professional consensus suggests that the most effective psychotherapies for treating PTSD in children and teens incorporate parental involvement, coping skills training, mastery of avoided trauma reminders, and structured exposure to traumatic memories through creating a narrative with a specially trained therapist (see http://www.nctsn.org/resources/topics/treatments-that-work/promising-practices). For young children, Child-Parent Psychotherapy is a well-established treatment with strong research support, (15) and Parent-Child Interaction Therapy is a promising intervention with some early research support for treating behavior problems in abused and neglected children. (16) Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) is a well-established treatment, with strong research support, for school-age children and adolescents. (17)(18) Cue-Centered Treatment is a newer intervention with initial research support for treating trauma-related symptoms in children and adolescents and may be particularly effective for youth with repeated or long-term trauma exposure. (19) Cognitive Behavioral Interventions for Trauma in Schools is a promising approach, with modest research evidence, for addressing trauma in the school setting using a group treatment model with elements similar to TF-CBT. (20) In addition, Prolonged Exposure Therapy for Adolescents, adapted from a well-established treatment for adults, has moderate research support for treating single-event traumas in adolescents. (21)(22) Dialectical behavior therapy has received support from 1 small study with adolescent girls. (24)
4. Evidence for the use of pharmacotherapy in treating symptoms of trauma in children and adolescence is limited, and, therefore, medication treatment is recommended only in cases in which symptoms are so severe that a child cannot participate in psychotherapy or other forms of therapeutic support, or when impairing comorbid symptoms are the focus of treatment. (25)
5. In settings where recommended treatments are not available, providers can consult a toolkit created by the National Child Traumatic Stress Network for additional resources on supporting children and families affected by trauma (https://www.healthcaretoolbox.org/).

References for this article are at http://pedsinreview.aappublications.org/content/39/2/68.

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1. A mother and her 2-year-old daughter were asleep in their home when there was a gas explosion. Both mother and child were hospitalized for burn injuries. You see the girl in the clinic 6 weeks after her injury. Her burns are healing well, but she has ongoing wound care. Although she had been sleeping through the night before her injury, she now wakes up in the early morning hours screaming, and it is difficult to calm her. It is impossible to calm her when she is taken to doctor visits, and she screams throughout visits, even when she is not touched and there are no painful medical interventions. You review the criteria for a diagnosis of posttraumatic stress disorder (PTSD) and note that there are 4 symptom areas that are required for a diagnosis. Which of the following PTSD diagnostic criteria is most consistent with the sleep concerns in this patient?
   A. Alterations in arousal and reactivity.
   B. Avoidance.
   C. Exposure to death or threatened death.
   D. Intrusion.
   E. Negative alterations in cognitions and mood.
2. A 6-year-old boy was in a motor vehicle collision in which his father was killed. The boy had abrasions, but no major injuries. He sees you for a visit a week after the collision and several days after his father's funeral. He is a good student and plays soccer on his school team. His mother asks you for advice on how to support his emotional health after his injury. Which of the following measures is the most effective in supporting recovery in this patient?
   A. Begin an antidepressant.
   B. Continue to participate on his soccer team.
   C. He and his family should move to a new home.
   D. Participate in counseling without his mother.
   E. Stay home from school with his family for a month.
3. A 7-year-old girl was separated from her family during a hurricane. She stayed at school for 24 hours with several teachers and students who were separated from their families. Her home was flooded and she and her family lived in a Red Cross shelter for several weeks. They are now sleeping on the floor of a family member's home. The girl has had sleep disturbance, cries easily, does not want to see her home, and asks her mother several times a day whether the house they are in will flood as well. Which of the following is the most appropriate management strategy for this patient's symptoms?
   A. Change of school setting.
   B. Individual psychotherapy.
   C. Medication to help her sleep.
   D. Psychotherapy for her and at least 1 of her parents.
   E. Psychotherapy for the parents alone without her.
4. A 16-year-old girl was raped at a party after a football game. Pictures were taken of the incident, and these photographs were shared at school. She has begun cutting herself, and her self-injurious behavior became obvious to her parents. They bring her to you for advice on how to support her in her recovery from this experience. Which of the following is the best next step in the management of this patient?
   A. Antidepressant medication.
   B. Child-Parent Psychotherapy.
   C. Dialectical Behavioral Therapy.
   D. Psychological debriefing.
   E. Sending her away to live with relatives.

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5. A 10-year-old boy has been diagnosed as having PTSD after recurrent episodes of physical abuse perpetrated by his father. His mother has found support in her church community, and several of the church parishioners have recommended a rebirthing "holding" ceremony to alleviate this boy's symptoms. The mother asks your opinion. Which of the following is the most appropriate intervention you would recommend for this patient?

   A. Child-directed play therapy.
   B. Child-Parent Psychotherapy.
   C. Proceed with the rebirthing "holding" ceremony.
   D. Psychological debriefing.
   E. Trauma-Focused Cognitive Behavioral Therapy.

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