### T RAUMA

Introduction

Definitional Considerations
Prevalence
Psychological Consequences Associated with Trauma
Categories
Comorbidity
Assessment
Evidence-based Practices
Psychological Treatments

Pharmacological Treatments
Unproven Treatments
Cultural Considerations

#### Introduction

A traumatic event is an event which threatens injury, death, or the physical body of a child or adolescent while also causing shock, terror or helplessness (American Psychological Association, 2008). Trauma refers to both the experience of being harmed by an external agent, as well as the response to that experience (Becker et al., 2003). Youth who experience trauma may also experience emotional harm or psychic trauma which, if left untreated, can have a significant impact (Pruit, as cited by the American Academy of Child & Adolescent Psychiatry [AACAP], 1998a). According to the American Psychological Association, a community sample revealed more than two-thirds of children report experiencing a traumatic event by age 16. Because a significant number of youth experience some traumatic incident during childhood (Copeland, Keeler, Angold & Costello, 2007), it is critical to clarify definitions of, risk factors for, and outcomes of exposure to trauma.

Trauma typically exists along a spectrum which ranges from global, when an event may affect many individuals (e.g., exposure to the September 11, 2001 attacks, Hurricane Katrina, earthquake in Haiti, exposure to war-related events), to individual, when the trauma impacts only that individual (e.g., rape, abuse, community violence, or being in an automobile accident). Research has also been conducted on simple and complex trauma and the impact on children and adolescents. Complex trauma is "children's experiences of multiple traumatic events that occur within the caregiving system – the social environment that is supposed to be the source of safety and stability in a child's life" (National Child Traumatic Stress Network [NCTSN], 2003). Complex trauma involves repeated traumatic events occurring over a period of time, usually beginning in childhood (e.g., repeated sexual abuse). Conversely, simple trauma usually refers to a single event, such as a rape or a shooting. Simple trauma is more likely to lead to posttraumatic stress disorder (PTSD), while complex trauma leads to a deeper and more pervasive set of changes involving emotional dysregulation, distorted thinking, behavioral dyscontrol, and patterns of dysfunctional interpersonal relationships (Personal Communication with Brian Meyer, Ph.D., June 7, 2010).

Early researchers noted that exposure to trauma may lead to feelings of anxiety, helplessness, dissociation (detachment of the mind from emotion), and behaviors, including hypervigilance (watchfulness or awareness of one's surroundings over and above what is normal), extreme behaviors and efforts to avoid re-experiencing the traumatic event, impulsivity, and even self-inflicted injury (Yates, 2004; Thomas, 2003). These symptoms are now included within the broad diagnostic category of PTSD (Yates; American Psychiatric Association [APA], 2000). While these symptoms may be consequences of trauma, they do not always occur following trauma. Additionally, risk factors can moderate the influence of exposure to trauma on the development of psychopathology.

This section will discuss trauma but focus primarily on the assessment and treatment of PTSD, a potential outcome of exposure to a traumatic event. Information about PTSD, which is discussed in the following paragraphs, is also referenced in the *Collection*'s "Anxiety Disorders" section.

#### **Definitional Considerations**

Trauma has not been a focus in developmental psychopathology literature until relatively recently. Beginning in the 1970's, psychologists began to examine the experience of individuals who have experienced traumatic events, with research focusing on soldiers returning from war and rape victims (Copeland, Keeler, Angold & Costello, 2007). This work has been enormously influential and has contributed greatly to the understanding of psychopathology (van der Kolk, Roth, Pelcovitz, Sunday & Sinazzola, 2005). However, early research was limited in that it focused almost exclusively on individuals in the military who experienced traumatic events outside of their home community and ignored the experiences of traumatic events in everyday life, including those which impact children (Karam & Ghosn, 2003). Additionally, early definitions of trauma emphasized the individual directly experiencing the violent act, such as military personnel in war or rape victims (Copeland, Keeler, Angold & Costello) and discounted the distress experienced by those who did not directly experience the trauma, e.g., witnessing domestic violence (Evans, Davies & DiLillo, 2008). The definition of trauma was subsequently broadened due to the recognition that indirect experiences were traumatic, that youth also experienced trauma, and that youth responded to trauma differently than adults (Carrion, Weems, Ray & Reiss, 2002).

In newer versions of the American Psychiatric Association's *Diagnostic and Statistical Manual (DSM, DSM-IV, and DSM-IV-TR)*, the definition of trauma has grown more inclusive to account for the distress caused by serious illness, the death of a loved one, natural disasters, or even community violence (Copeland, Keeler, Angold & Costello, 2007; Rodriguez, Steinberg & Pynoos, 1999). In the context of PTSD, the *DSM-IV-TR* (APA, 2000) defines trauma as:

an extreme traumatic stressor involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; witnessing an event that involves death, injury, or a threat to the physical integrity of another person' or learning about unexpected of violent death, serious harm, or threaten of death or injury experienced by a family member or other close associate.

According to the *DSM-IV*, a youth is exposed to a traumatic event if they experience the event personally, witness another individual's experience of the event, or learn about a close associate's (friend or family) traumatic experience (2000). Examples of trauma mentioned in the *DSM-IV* include directly experiencing, witnessing, or learning about a loved one's experience with war, violent personal assault, kidnapping, terrorist attack, natural disaster, severe accidents, or diagnosis of a life-threatening illness.

In terms of complex trauma (repeated traumatic events), a survey of children receiving intervention and/or comprehensive assessment services for trauma exposure found that initial trauma exposure typically occurs at age five. Additionally, it was found that interpersonal victimization is the most prevalent form of trauma exposure, followed by sexual maltreatment/assault, and neglect. Specifically, psychological maltreatment (e.g., verbal/emotional abuse or emotional neglect), traumatic loss, dependence on an impaired caregiver (i.e., parent with psychopathology or substance abuse), and domestic violence are the most frequently cited forms of interpersonal victimization (NCTSN, 2003).

#### Prevalence

Due to the shifting definition of trauma, it has been difficult to come to a consensus on the prevalence of trauma among children. Evans, Davies & DiLillo (2008) estimate that each year 4.8 million acts of violence are committed against women, with 2.9 million are committed against men. Not only do these experiences have a profound effect on these individuals, they may also impact others who are exposed to this violence. As many as 17.8 million children are exposed to domestic violence each year as witnesses to or as targets of violent events (Evans, Davies & DiLillo). Retrospective data suggests that 20 to 40 percent of adults reported witnessing domestic violence as a child or adolescent (Evans, Davies & DiLillo). In a large epidemiological study of trauma and PTDS in youth, 68 percent of 16 year olds in a community sample reported exposure to at least one traumatic event (Copeland, Keeler, Angold & Costello, 2007). Of those, 37 percent reported exposure to multiple traumas and

almost 6 percent report exposure to at least one traumatic event in the last three months (Copeland, Keeler, Angold & Costello). While shocking, this rate is consistent with the rate of trauma exposure reported in other studies (Green et al., 2000).

#### **Psychological Consequences Associated with Trauma**

Experiencing trauma can lead to a broad range of potential psychological outcomes. Trauma-exposure itself is not a diagnosable disorder, according to the *DSM-IV-TR*. It is important to note that, while the factors discussed in this section may be consequences of trauma, they do not always occur following trauma and, trauma is not a necessary precondition for psychopathology (APA, 2000). Additionally, exposure to trauma does not dictate later psychopathology, and individual differences and risk factors can moderate the influence of exposure to trauma, as well as the development of its symptoms.

According to the NCTSN, there are a number of domains in which a child may experience long-term impairment following exposure to complex trauma (2003). Some children and adolescents exposed to trauma may exhibit physical or physiological differences. These difficulties may include hypersensitivity to physical contact, numbness, problems with coordination and balance, and somatization (a process when mental and emotional stresses becoming physical). Children and adolescents exposed to trauma may have increased medical problems such as asthma, autoimmune disorders, and pseudoseizures (NCTSN).

Potential cognitive outcomes for children and adolescents exposed to trauma include difficulties with attention, executive functioning, planning, and learning (NCTSN, 2003). These youth may also exhibit a lack of sustained curiosity, have problems processing new information, have difficulties with language, and have impairments in auditory, visual, or spatial perception and comprehension (NCTSN). Children exposed to complex trauma may experience difficulties forming attachments and may have distrust of and/or uncertainty of those around them. This can lead to difficulties setting boundaries, as well other interpersonal difficulties (NCTSN).

Children and adolescents exposed to trauma may also experience negative outcomes related to emotion. Children may have difficulties with affect regulation, which may make it difficult for them to identify and describe feelings and internal experiences. They may also experience dissociative symptoms, such as depersonalization and derealization, and may even have amnesia for state-based events. Also, many youth exposed to trauma experience low self-esteem, shame or guilt, disturbances of body image, and/or lack of a predictable sense of self (NCTSN, 2003). Table 1 summarizes the potential difficulties children and adolescents may have after exposure to complex trauma.

#### **Categories**

In addition to the many symptoms identified in previous sections, the *DSM-IV-TR* defines two specific disorders specifically related to trauma-exposure; PTSD and acute stress disorder (ASD), both of which are classified as anxiety disorders. These diagnoses may be applied to both youth and adults if their behavior is consistent with the criteria set forth in the *DSM-IV-TR*. Table 2 provides a brief summary of these disorders.

According to the *DSM-IV-TR*, symptoms of ASD are experienced during or immediately after trauma and may last for a maximum of four weeks before the diagnosis must be reassessed. If the symptoms persist past four weeks, the youth may be then diagnosed with PTSD if the criteria are met. However, a youth may be diagnosed with PTSD without having been previously diagnosed with ASD. Comparing genders, some studies have found that roughly twice the proportion of females meet criteria for PTSD (Kilpatrick, et al., 2003).

## Summary of Potential Outcomes of Complex Trauma in Children and Adolescents

Domain	Potential Difficulties
Physical/ Physiological	Hypersensitivity to physical contact
	Numbness
	Problems with coordination and balance
	Increased somatization
Medical	Asthma
	Autoimmune disorders
	Pseudoseizures
	Sleep disturbances
	Disordered eating
Cognitive	Attention
	Executive functioning
	Learning
	Lack of sustained curiosity
	Problems processing new information.
	Difficulties with language
	Impairments in auditory, visual, or spatial
	perception and comprehension
Attachment/Relationships	Distrust of and/or uncertainty about those around them
	Difficulties with boundaries
	Interpersonal difficulties
Behavioral	Behavioral (impulse) control
	Self-destructive behavior
	Aggression
	Difficulty complying with rules
	Oppositional behavior
	Excessive compliance
Emotional	Affect regulation
	Dissociative symptoms (e.g., depersonalization
	or derealization)
	Amnesia
	Low self-esteem
	Shame or guilt
	Disturbances of body image
	Lack of a predictable sense of self

Source: NCTSN, 2003.

Table 2

# *DSM-IV-TR* Disorders Affecting Children & Adolescents Exposed to Trauma

Disorder	Description
Posttraumatic Stress Disorder (PTSD)	Re-experiencing, avoidance and hyper-arousal symptoms following a traumatic event; diagnosed at least four weeks after trauma-exposure
Acute Stress Disorder (ASD)	Dissociative, re-experiencing, avoidance and hyper-arousal symptoms following a traumatic event; diagnosed after lasting two days to four weeks after trauma

Source: APA, 2000.

Finally, there is some controversy over trauma-related diagnoses in the *DSM-IV-TR*. The NCTSN (2003) found that many children exposed to trauma exhibit several forms of posttraumatic symptoms that "are not captured by standard PTSD, depressive, or anxiety disorder diagnoses." Specifically, 50 percent or more of the children surveyed who had been exposed to trauma exhibit difficulties in the domains of affect regulation, attention and concentration, negative self-image, impulse control, and aggression/risk-taking (NCTSN). One-third of the children exposed to trauma exhibited problems with somatization, attachment, conduct disorder or oppositional defiant disorder, sexual interest/activity/avoidance, and/or dissociation (NCTSN). Childhood psychopathology related to trauma can manifest differently in children/adolescents than in adults. Children exposed to trauma exhibit a wide variety of symptoms and domains of impairment. As such, the current *DSM-IV-TR* may not be sufficiently sensitive to the symptoms exhibited by traumatized children (Karam & Ghosn, 2003: Carrion et al. 2002; van der Kolk, 2005).

#### Comorbidity

Children and adolescents exposed to trauma very often experience other kinds of problems. Those with ASD or PTSD may have symptoms of despair and hopelessness to the extent that they may meet criteria for a Major Depressive Episode, and thus Major Depressive Disorder may be an appropriate diagnosis. Other youth with ASD or PTSD may experience guilt over their trauma, feeling as though they played a role. Some studies have found that as many as 75 percent of adolescents diagnosed with PTSD have at least one comorbid diagnosis of either Major Depressive Episode or Substance Abuse/Dependence (Kilpatrick et al., 2003). Research has found that alcohol and other substances may be used to cope with symptoms of trauma-related anxiety (Jellinek, Patel & Froehle, 2002). However, the use of substances can ultimately worsen symptoms, and certain substances can actually generate anxiety symptoms. Another study of preschool-aged children with PTSD who had been exposed to Hurricane Katrina found that 89 percent had at least one comorbid disorder, with oppositional defiant disorder (ODD) and separation anxiety disorder (SAD) being the most common (Scheeringa & Zeanah, 2008). Additionally, in children, diagnosis of ASD after an assault or a motor vehicle accident has been found to predict later development of PTSD (Meiser-Stedman, Yule, Smith, Glucksman & Dalgledish, 2005). As PTSD is assessed and treated, it is important to monitor for other potential comorbid disorders.

Many of the behaviors seen in traumatized children fall in *DSM-IV-TR* diagnoses other than PTSD and ASD. This is related to difficulties associated with the current definitions of these disorders as they apply to children (Karam & Ghosn, 2003; Carrion, Weems, Ray & Reiss, 2002; van der Kolk et al., 2005). Thus, discussions of comorbidity must be tempered with the knowledge that youth exposed to trauma may exhibit impairment across a broad range of domains, as discussed previously and outlined in Table 1. Current diagnostic categories may not clearly categorize all the potential symptoms of youth exposed to trauma.

#### **Assessment**

While previous sections have focused broadly on trauma, the following focus more specifically on the assessment and treatment of PTSD. Any attempt to define problematic posttraumatic stress in youth must clearly define what constitutes a normal response to difficult events, loss and trauma. Assessing the impact of trauma using current definitions of trauma may not properly screen for those children and adolescents who go on to develop psychopathology. The suggested assessment tools for trauma are summarized in Table 3.

Not all children who are exposed to trauma are at equal risk for developing PTSD, and children may not meet full criteria for PTSD but may still have distressing and/or impairing symptoms. Accordingly, careful assessment is critical, as is knowledge of normal child development and normative reactions to difficult life events or trauma.

Table 3

Suggested Assessment Tools for Trauma

Measure			
Type	Name of Measure	Who Completes	What is Learned
Clinical Interview	Anxiety Disorders Interview Schedule – Child (ADIS-C) and parent versions (ADIS-P)	Child, Parent	Whether a child meets criteria for PTSD based on <i>DSM-IV</i> criteria
Clinical Interview	Schedule for Affective Disorders and Schizophrenia- Children's Present and Lifetime Version (K-SADS-PL)	Child, Parent	Whether a child meets criteria for PTSD based on <i>DSM-IV</i> criteria
Clinical Interview	Clinician-Administered PTSD Scale for Children and Adolescents (CAPS-CA)	Child/Adolescent (ages 8-15 years)	Whether child has been exposed to trauma, overall symptom severity, and whether a current or lifetime diagnosis of PTSD/ASD is indicated based on <i>DSM-IV</i> criteria
Rating Scale	UCLA PTSD Reaction Index (Child, Adolescent, and Parent versions)	Child, Adolescent, Parent	Whether a child has trauma exposure, PTSD symptoms (including duration of symptoms) based on <i>DSM-IV</i> criteria
Rating Scale	Child PTSD Symptom Scale (CPSS)	Child/Adolescent (ages 8-18 years)	Frequency of all <i>DSM-IV</i> -defined PTSD symptoms in children and <i>DSM-IV</i> diagnosis
Symptom Checklist	Trauma Symptom Checklist for Children (TSCC)	Child/Adolescent (ages 8-16 years)	Whether a child has acute and chronic posttraumatic symptoms; includes clinical scales and validity scales; measure does not assess DSM-IV criteria specifically
Symptom Checklist	PTSD Checklist – Child and Parent Report versions (PCL- C/PR)	Child, Parent	Whether child has symptoms of PTSD; measure does not assess for traumatic events or child functioning

Sources: Hawkins & Radcliffe, 2006; Southam-Gerow & Chorpita, 2007; NCTSN, 2003.

Since PTSD is often comorbid with other disorders, assessment typically involves asking about an array of potential problems. Assessment for PTSD in children should also include a medical history and a physical examination within the past 12 months, with special focus on conditions that may mimic PTSD or other anxiety disorders (AACAP, 1998b). Assessing for PTSD may require using multiple ways to gather information in order to understand the youth's behavior across the many settings, e.g., school, home. Typically, questionnaires and interviews are used to assess for symptoms of PTSD. Some questionnaires that measure PTSD symptoms in children/adolescents are the UCLA PTSD Reaction Index, PTSD Symptom Scale (PSS), and the Trauma Symptom Checklist for Children (TSCC). These measures have moderate to strong psychometric profiles, but further expanded normative and clinical group studies of measures are needed (Hawkins & Randcliffe, 2006). However, these measures may be useful starting points for assessing symptoms. A parent-report measure, the PTSD Checklist/Parent Report has been found to have strong psychometric properties (AACAP, 1998b). However, when a parent or caregiver is the alleged perpetrator of child abuse or domestic violence, it is imperative that the clinician interview other caretakers (AACAP, 1998b).

Structured diagnostic interviews can be particularly helpful in assessing children, particularly when administered independently to the child and parent. When interviewing a child, it is important to use developmentally appropriate language. Two specifically strong diagnostic interviews are the Anxiety Disorders Interview Schedule for Children (ADIS-C) and the Schedule for Affective Disorders and

Schizophrenia-Children's Present and Lifetime Version (K-SADS-PL). Both interviews have demonstrated strong psychometric characteristics for anxiety disorders (e.g., PTSD) across many studies (Hawkins & Radcliffe, 2006; Southam-Gerow & Chorpita, 2007). The ADIS-C includes a PTSD section and can be used with child and parent reports. In the K-SADS-PL, the clinician is asked to integrate parent and child reports, and initially asks whether a variety of traumatic events has occurred recently or in the past and then assesses the criteria for a diagnosis of PTSD in relation to the specific event (Hawkins & Radcliffe). Additionally, the Clinician-Administered PTSD Scale for Children and Adolescents (CAPS-CA) is a semi-structured interview to assess PTSD symptoms in youth that was developmentally modified from an adult version (Hawkins & Radcliffe).

There are a number of potential considerations when assessing for PTSD in youth. First, the DSM-IV-TR definition of PTSD requires a verbal description of experiences or emotional states and does not include appropriate developmental modifications, which may result in under-diagnosis (Hawkins & Radcliffe, 2006). Second, diagnosis relies on report of symptoms and internal experiences which may be difficult for young children to verbalize, as they may not have developed cognitively to the point that they are able to describe their internal experiences. Often, the diagnosis may rely on parents' reports of symptoms. Additionally, youth who have experienced trauma within close relationships may have distrust and uncertainty about those around them, particularly if a trusted adult was a perpetrator (NCTSN, 2003). As such, these youth may resist disclosing information because they may fear additional family chaos and may also fear that others will perceive them as peculiar. Moreover, youth may have a variety of outcomes after the exposure to the trauma, as well as having comorbid symptoms. Some symptoms may be externalizing, such as behavior problems or aggression, and these overt symptoms may attract more clinical attention than internalizing symptoms (NCTSN). Finally, Hawkins and Radcliffe suggest that children who are exposed to a single traumatic event may be different in some ways than children who have been exposed to multiple traumatic events or prolonged stressors, as in complex trauma (NCTSN). Often, multiple traumas are not assessed, and symptom report relies on recalling the most recent traumas (Hawkins & Radcliffe).

#### **Evidence-based Practices**

There are many treatments for PTSD described in the literature, yet not all have been found to be equally effective. Only one family of treatments has been studied enough to declare it an evidence-based treatment: Trauma-Focused Cognitive Behavioral Therapy (TF-CBT). It is worth noting that TF-CBT has been tested and found to be more effective than other active treatments in treating childhood PTSD symptoms across six separate randomized clinical trials.

Table 4 shows treatments divided into four groups: What Works, What Seems to Work, Not Adequately Tested and What Does Not Work.

#### Psychological Treatments

Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) has been shown to be effective across a number of randomized controlled trials and to be more effective than other treatments (e.g., child-centered play therapy) at improving PTSD, as well as symptoms of depression, shame, and behavioral problems (Cohen, Deblinger, Mannarino & Steer, 2004; Cohen, Kelleher & Mannarino, 2008). Parents who participated in the treatment with their children have also been shown to have decreased traumadistress and depression and improved parenting skills.

### Summary of Evidence-based Practices for Youth with PTSD

What Works	Description	
Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)	Treatment that involves reducing negative emotional and behavioral responses related to trauma, by providing psychoeducation on trauma, addressing distorted beliefs and attributes related to trauma, introducing relaxation and stress management techniques, and developing a trauma narrative in a supportive environment	
What Seems to Work	Description	
School-based Group Cognitive Behavioral Therapy (CBT)	Similar components to TF-CBT, but in a group, school-based format	
Not Adequately Tested	Description	
Child-centered Play Therapy	Therapy that utilizes child-centered play to encourage expression of feelings and healing	
Psychological Debriefing	An approach in which youth talk about the facts of the trauma (and associated thoughts and feelings) and then are encouraged to re-enter into the present	
Pharmacological Treatments	Treatment with selective serotonin reuptake inhibitors (SSRIs)	
What Does Not Work	Description	
Restrictive rebirthing or holding techniques	Restrictive rebirthing or holding techniques that may forcibly bind or restrict, coerce, or withhold food/water from children and have resulted in some cases of death and are not recommended	

Sources: Cohen, Deblinger, Mannarino & Steer, 2004; Cohen, Kelleher & Mannarino, 2008; Silverman et al., 2008; AACAP, 1998b.

The TF-CBT model is based on cognitive and learning theories about the development of traumatic stress in youth, as well as information on effective interventions for adult PTSD and other child anxiety disorders (Cohen, Deblinger, Mannarino & Steer, 2004). TF-CBT treatment includes core elements (that make up the acronym PRACTICE; Cohen, Kelleher & Mannarino, 2008), with each practice component building on skills gained in previous sessions (Cohen, Deblinger, Mannarino & Steer, 2004). The elements described by Cohen (2008) are outlined below.

- Children and parents are provided with <u>P</u>sychoeducation about trauma and PTSD symptoms, and parents are provided with parenting skills to aid in the management of the child's symptoms.
- Relaxation skills are provided.
- Affective expression and modulation skills are treatment components.
- Cognitive coping skills are provided.
- A Trauma narrative is developed and processed.
- In-vivo mastery of trauma reminders is introduced to differentiate between reminders and dangerous cues in the environment.
- Conjoint sessions, where the child and parent focus on having the child share his or her narrative and working on family communication, are also included.
- Finally, Enhancing safety focuses on safety planning in the future.

These components take 12 to 16 sessions (Cohen, Deblinger, Mannarino & Steer, 2004). Similar to other cognitive-behavioral treatments, parent involvement and knowledge of skills are considered to be important components of treatment so that parents can help children with the skills outside of the therapy sessions.

Although TF-CBT has the most research support, school-based group Cognitive Behavioral Therapy (CBT) has shown some promise in a few studies (Cohen, Kelleher & Mannarino, 2008; Silverman et al., 2008). School-based group CBT uses PRACTICE components similar to TF-CBT.

However, all elements, except for the trauma narrative, which is an individual activity, are provided in a group format, and parents are rarely involved. There is also a teacher educational component and peer support (Cohen, Kelleher & Mannarino).

#### Pharmacological Treatments

While pharmacological treatments (e.g., selective serotonin reuptake inhibitors [SSRIs]) have been found to be useful in treating other anxiety disorders, there is inadequate support for pharmacological interventions in the treatment of PTSD (AACAP, 1998b). One study examined the effects of adding the SSRI sertraline to a TF-CBT intervention for PTSD and found that there was minimal evidence of a benefit of adding sertraline to TF-CBT (Cohen, Mannarino, Perel & Staron, 2007). Research has shown that employing TF-CBT to treat PTSD, prior to adding medication, is warranted. In general, if a youth with PTSD also is diagnosed with depression, anxiety, panic and/or ADHD symptoms, clinicians are urged to choose medications based on the evidence for treating the comorbid condition (AACAP, 1998b).

#### **Unproven Treatments**

There are many treatments for PTSD which have not yet been tested and others which have no research to support their effectiveness. Moreover, some treatments which have been studied have been found to be "less effective, not effective, or harmful" in treating children with PTSD (Cohen, Kelleher & Mannarino, 2008). One intervention, psychological de-briefing, in which children are encouraged to talk about the trauma, as well as their thoughts and feelings, before re-entering into the present, has been studied and found to have no significant effects (Cohen, Kelleher & Mannarino). Nondirective, or child-directed, play and other unstructured treatment approaches are less effective at treating effects of trauma than TF-CBT (Cohen, Kelleher & Mannarino). Other treatments, such as restrictive rebirthing or holding techniques, have been found to be harmful to children and should not be used (Cohen, Kelleher & Mannarino).

#### **Cultural Considerations**

The understanding of trauma and its outcomes may vary significantly from culture to culture. For instance, Latino children may experience a symptom known as *susto*, meaning "fright" or "soul loss" (APA, 2000). *Susto* can occur following a frightening event and may impact social relationships, appetite and sleep, enhance feelings of sadness, decrease motivation, and increase feelings of worthlessness (APA).

Research suggests that providers address cultural issues directly with the parents and, if appropriate, the child they are treating (Cohen, Mannarino & Deblinger, 2006). It is important for therapists to recognize that painful and distressing responses to trauma are universal, even if the specific symptoms vary to some extent from culture to culture (Cohen, Mannarino & Deblinger). Further, while therapists are not able to change their own cultural background, they can learn about and be respectful of other cultural reactions to traumatic experiences while providing effective psychological treatment for trauma-related psychopathology (Cohen, Mannarino & Deblinger). As of 2008, TF-CBT treatment materials have been translated into Spanish, Dutch, and German (Cohen, Kelleher & Mannarino, 2008). TF-CBT is also being culturally adapted for use with African children impacted by human immunodeficiency virus (HIV) (Cohen, Kelleher & Mannarino).

#### Sources

American Psychiatric Association (APA). (2000). *Diagnostic and statistical manual of mental disorders* (4<sup>th</sup> ed., text rev.) (DSM-IV-TR). Washington, DC: Author.

American Psychological Association. (2008). Children and trauma: update for mental health professionals. 2008 Presidential Task Force on Posttraumatic Stress Disorder and Trauma in Children and Adolescents. [Online]. Available: http://www.apa.org/pi/families/resources/update.pdf. [May 2013].

- American Academy of Child & Adolescent Psychiatry [AACAP). (1998a). Your child childhood trauma and its effects. Excerpt from Your Child Emotional, Behavioral, and Cognitive Development from Birth through Preadolescence. [Online]. Available: <a href="http://www.aacap.org/cs/root/publication\_store/your\_child\_childhood\_trauma\_and\_its\_effects">http://www.aacap.org/cs/root/publication\_store/your\_child\_childhood\_trauma\_and\_its\_effects</a>. [May 2013].
- American Academy of Child & Adolescent Psychiatry (AACAP). (1998b). Practice parameters for the assessment and treatment of children and adolescents with posttraumatic stress disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*, 37 (10), 4S-26S.
- Becker, D., et al. (2003) Trauma and adolescence I: The nature and scope of trauma. Adolescent Psychiatry. FindArticles.com. [Online]. Available: http://findarticles.com/p/articles/mi\_qa3882/is\_200301/ai\_n9209923. [June 2010]. *Not available May 2013*.
- Carrion, V., Weems, C., Ray, R., & Reiss, A. (2002). Toward and empirical definition of pediatric PTSD: The phenomenology of PTSD symptoms in youth. *Journal of the American Academy of Child Adolescent Psychiatry*, 41 (2), 166-173.
- Cohen, J., Kelleher, K., & Mannarino, A. (2008). Identifying, treating, and referring traumatized children: The role of pediatric providers. *Archives of Pediatric Adolescent Medicine*, *162* (5), 447-452.
- Cohen, J., Mannarino, A., & Deblinger, E. (2006). *Treating Trauma and Traumatic Grief in Children and Adolescents*. New York: Guiford Press.
- Cohen, J., Deblinger, E., Mannarino, A., & Steer, R. (2004). A multisite, randomized controlled trial for children with sexual abuse-related PTSD symptoms. (Trauma-Focused CBT). *Journal of the American Academy of Child and Adolescent Psychiatry*, *43*, 393-402.
- Cohen, J., Mannarino, A., Perel, J., & Staron, V. (2007). A pilot randomized controlled trial of combined Trauma-Focused CBT and Sertraline for childhood PTSD symptoms. *Journal of the American Academy of Child and Adolescent Psychiatry*, *46* (7), 811-819.
- Copeland, W., Keeler, G., Angold, A., & Costello, J. (2007). Traumatic events and posttraumatic stress in childhood. *Archives of General Psychiatry*, 64 (5), 577-584.
- Evans, S., Davies, C., & DiLillo, D. (2008). Exposure to domestic violence: A meta-analysis of child and adolescent outcomes. *Aggression and Violent Behavior, 13* (2), 131-140.
- Green, B., Goodman, L., Krupnick, J., Corcoran, C., Petty, R., Stockton, P., & Stern, N. (2000). Outcomes of single versus multiple trauma exposure in a screening sample. *Journal of Traumatic Stress*, *13* (2), 271-286.
- Hawkins, S., & Radcliffe, J. (2006). Current measures of PTSD for children and adolescents. *Journal of Pediatric Psychology, 31* (4), 420-430.
- Jellinek, M., Patel, B., & Froehle, M. (Eds.). (2002). *Bright Futures in Practice: Mental Health*–Volume 1, Practice Guide. Arlington, VA: National Center for Education in Maternal and Child Health.
- Karam, E., & Ghosn, M. (2003). Psychosocial consequences of war among civilian populations. *Current Opinion in Psychiatry*, *16*, 413-419.
- Kilpatrick, D., Ruggiero, K., Acierno, R., Saunders, B., Resnick, H., & Best, C. (2003). Violence and risk of PTSD, major depression, substance abuse/dependence, and comorbidity: Results from the national survey of adolescents. *Journal of Consulting and Clinical Psychology, 71* (4), 692-700.

- Meiser-Stedman, R., Yule, W., Smith, P., Glucksman, E., & Dalgleish, T. (2005). Acute stress disorder and posttraumatic stress disorder in children and adolescents involved in assaults or motor vehicle accidents. *American Journal of Psychiatry*, *162*, 1381-1383.
- National Child Traumatic Stress Network. (2003). Complex trauma in children and adolescents: White paper (Complex Trauma Task Force). [Online]. Available: http://www.nctsnet.org/nccts/asset.do?id=478. [February 2010]. Not available May 2013.
- Rodriguez, N., Steinberg, A., & Pynoos, R. (1999). CLA PTSD index for DSM-IV instrument information: Child version, parent version, adolescent version. California: UCLA Trauma Psychiatry Service.
- Scheeringa, M., & Zeanah, C. (2008).Reconsideration of harm's way: onsets and comorbidity patterns of disorders in preschool children and their caregivers following Hurricane Katrina. *Journal of Clinical Child and Adolescent Psychology*, 37 (3), 508-518.
- Silverman, W., Ortiz, C., Viswesvaran, C., Burns, B., Kolko, D., Putnam, F., & Amaya-Jackson, L. (2008). Evidence-based psychosocial treatments for children and adolescents exposed to traumatic events. *Journal of Clinical Child & Adolescent Psychology*, *37* (1), 156-183.
- Southam-Gerow, M., & Chorpita, B. (2007). Anxiety in children and adolescents. *In* E. Mash & R. Barkley (Eds.), *Assessment of childhood disorders* (4<sup>th</sup> ed.), 347-397, New York: Guilford Press.
- van der Kolk, B., Roth, S., Pelcovitz, D., Sunday, S., & Sinazzola, J. (2005). Disorders of Extreme Stress: The Empirical Foundation of a Complex Adaptation to Trauma. *Journal of Traumatic Stress,* 18 (5), 389-399.
- Thomas, P. (2003). Protection, dissociation, and internal roles: Modeling and treating the effects of child abuse. *Review of General Psychology*, 7 (4), 364-380.
- U.S. Department of Health and Human Services. (2004). *Risk and protective factors for child abuse and neglect*. Washington, DC: Child Welfare Information Gateway.
- Yates, T. (2004). The developmental psychopathology of self-injurious behavior: Compensatory regulation in posttraumatic adaptation. *Clinical Psychology Review, 24* (1), 35-74.

#### **Organizations**

#### **Anxiety Disorders Association of America (ADAA)**

8730 Georgia Avenue, Suite 600 – Silver Spring, MD 20910 http://www.adaa.org

#### Child Welfare League of America (CWLA)

440 First Street NW, Third Floor – Washington, DC 20001-2085 http://www.cwla.org

#### **International Society for Traumatic Stress Studies (ISTSS)**

111 Deer Lake Road, Suite 100 – Deerfield, IL 60015 http://www.istss.org//AM/Template.cfm?Section=Home

#### **Medical University of South Carolina (MUSC)**

Trauma Focused-Cognitive Behavioral Therapy http://tfcbt.musc.edu

#### **National Anxiety Foundation**

3135 Custer Drive – Lexington, KY 40517 http://www.lexington-on-line.com/naf.html

#### **National Child Traumatic Stress Network**

http://www.nctsnet.org

#### **Prevent Child Abuse America**

228 S. Wabash Avenue, 10 FL – Chicago, IL 60604 800-CHILDREN (244-5373) or 312-663-3520 http://www.preventchildabuse.org/index.php

#### **Virginia Resources**

#### **ChildSavers Guidance Clinic & Trauma Response**

200 North 22nd Street – Richmond, VA 23223 804-644-9590 (*Ask for a Trauma Response therapist, if applicable.*) http://www.childsavers.org

#### **Focus Adolescent Services**

Family Help in Virginia http://www.focusas.com/Virginia.html

#### **Prevent Child Abuse Virginia**

4901 Fitzhugh Avenue, Suite 200 – Richmond, VA 23230 e-mail:jschuchert@pcav.org http://pcav.org

#### **University of Virginia Health System**

http://www.healthsystem.virginia.edu

#### Virginia Commonwealth University (VCU)

Center for Psychological Services and Development Anxiety Clinic

http://www.has.vcu.edu

VCU Medical Center
Virginia Treatment Center for Children
http://www.vcuhealth.org/vtcc

#### Virginia Polytechnic Institute and State University (VA Tech)

Psychological Services Center Child Study Center http://www.psyc.vt.edu