

# Psychotherapeutic options for traumatized children

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## Purpose of review

This review addresses two issues. First, it updates readers on new treatments for traumatized children. Second, it examines the breadth of target problems that current evidence-based treatments for child posttraumatic stress disorder (PTSD) effectively address in the context of current diagnostic uncertainty. Specifically, changes have been proposed to the Diagnostic and Statistical Manual for Mental Disorders Fourth Edition (DSM-IV) diagnostic criteria for PTSD and a proposal has been submitted to add a new developmental trauma disorder to optimally describe the range of outcomes experienced by traumatized children.

## Recent findings

Three recently completed treatment studies are described. A review of five established child trauma treatments for PTSD, child–parent psychotherapy, cognitive behavioral interventions for trauma in schools, cognitive behavioral therapy for PTSD, structured psychotherapy for adolescents responding to chronic stress, and trauma-focused cognitive behavioral therapy documents that these treatments effectively resolve problems in multiple domains beyond the current PTSD diagnostic criteria. These domains include affective dysregulation, behavioral dysregulation, cognitive dysregulation, and relational dysregulation.

## Summary

New treatments for children are promising for treating PTSD and some other symptoms. Current evidence-based child trauma treatments address a broad array of trauma-related difficulties.

## Keywords

children, developmental trauma disorder, evidence-based treatment, posttraumatic stress disorder, trauma

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## Introduction

Effective treatments are available for children and youth who develop significant emotional or behavioral difficulties following traumatic experiences ('traumatized children'). Posttraumatic stress disorder (PTSD) is the prototypical trauma-related disorder included in the Diagnostic and Statistical Manual of Mental Disorders Fourth Edition [1]. Many trauma-focused treatment models effectively improve child PTSD symptoms [2<sup>\*</sup>]. This review begins with an update of new child treatment studies for child PTSD. However, traumatized children may develop a wide range of problematic outcomes. Growing empirical evidence suggests that the current DSM-IV-TR iteration of these PTSD criteria may be overly stringent for children or need developmental adjustments to be appropriate for children [3<sup>\*</sup>]; or many additional and/or different diagnostic criteria may be needed to accurately describe the outcomes experi-

enced by traumatized children [4]. Two independent efforts are currently underway to address these concerns.

In March 2010, the Task Force for DSM-V (<http://www.dsm5.org>) proposed making several revisions to the DSM-IV-TR PTSD diagnosis based on the extant research. The changes most relevant to this paper include 1. decreasing the number of criteria required in some clusters for a PTSD diagnosis in children; 2. creating a new symptom cluster for maladaptive trauma-related cognitions and mood (e.g., persistent, exaggerated negative expectations of one's self, others or the world; persistent distorted self-blame or other-blame about the trauma; negative emotional state, for example guilt, shame, anger), and 3. including additional criteria related to behavior dysregulation (reckless or self-destructive behavior). An independent effort by child trauma professionals has proposed the introduction of a new diagnosis, developmental trauma disorder. This proposal

includes persistent dysregulation in several areas such as affect and physiology, behavior and attention, and self and relationships (maladaptive attributions such as impaired trust, negative self-image, and worthlessness are included in this cluster). The disorder is specifically for individuals exposed to multiple or prolonged interpersonal violence and disruption of protective caretaking [5<sup>•</sup>].

A legitimate question is whether proven treatments for child PTSD have efficacy in addressing the above problems, since the degree of overlap between PTSD and the proposed developmental trauma disorder is uncertain [6]. This question is timely in light of the above efforts to revise the existing trauma-related diagnostic criteria. This paper evaluates five child trauma treatment models for empirical evidence of improving problems in the following domains, each of which is proposed for inclusion in one or both of the above revised child trauma disorders: 1. affective dysregulation; 2. behavioral dysregulation; 3. cognitive dysregulation; and 4. relational dysregulation.

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### **New treatments for child trauma**

A Medline search was conducted to locate published treatment trials, and developers of prominent treatment models within the United States Substance Abuse and Mental Health Services Administration-sponsored National Child Traumatic Stress Network (NCTSN, www.nctsn.org) were contacted regarding novel adaptations of previously tested models. Due to space restrictions, models of high reader interest have been selected for review here. These treatments are different from existing evidence-based treatments for childhood trauma in the following ways: 1. two of the treatment models were specifically tested for war-exposed children, a trauma exposure for which evidence-based treatment heretofore had not been established and 2. one of the treatments was delivered by nonmental health professionals (teachers and school guidance counselors). Throughout this review treatments are listed alphabetically.

### **KID narrative exposure therapy**

KID narrative exposure therapy (KIDNET) is designed for survivors of multiple and severe trauma such as war, torture, domestic or repeated sexual violence [7<sup>•</sup>]. KIDNET includes psychoeducation about the importance of reconstructing a life narrative, and then assists the child in recreating a complete life narrative free of fragmentation (i.e., including both pleasant and traumatic experiences). KIDNET includes a strong focus on child and human rights to assist children to gain dignity and acknowledge what has occurred. Refugee children were randomized to KIDNET or a wait list control in one study that documented the superior efficacy of KIDNET in improving children's PTSD symptoms [7<sup>•</sup>].

### **Support for students exposed to trauma**

Support for students exposed to trauma (SSET) is an application of Cognitive Behavioral Interventions for Trauma in Schools (CBITS, described below), adapted so that nonmental health professionals such as classroom teachers and school counselors can deliver the treatment, thus further increasing its accessibility [8<sup>••</sup>]. SSET includes the skill-building components of CBITS but facilitators do not assist children in developing trauma narratives or in cognitive processing. A pilot study of the SSET model demonstrated that children with the most severe PTSD scores experienced significant improvement in these symptoms and classroom teachers reported improvement in children's external behavior problems [8<sup>••</sup>].

### **University of California Los Angeles trauma grief component treatment**

Trauma grief component treatment (TGCT) is an assessment-driven program for adolescents with exposure to trauma, traumatic loss, and severe adversity at high risk for severe persistent distress, functional impairment, and developmental disruption [9<sup>•</sup>]. Components include psychoeducation, coping interventions, as appropriate trauma and/or grief processing, building social support skills, problems solving skills, engaging adolescent capacities, and reappraising traumatic expectations. A randomized controlled treatment trial (RCT) of school-based TGCT versus an active comparison condition for Bosnian war-exposed youth demonstrated that the TGCT group experienced significantly greater improvement in maladaptive grief reactions and PTSD symptoms [9<sup>•</sup>].

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### **Do child trauma treatments effectively treat problems beyond Diagnostic and Statistical Manual for Mental Disorders fourth edition posttraumatic stress disorder?**

To address this question, five evidence-based treatments for child PTSD were selected for review. Four NCTSN models were selected based on being commonly requested by community therapists for dissemination and implementation. Each of these models has been used in at least one NCTSN Learning Collaborative, a year-long dissemination process through which multiple agencies imbed the model within their organizational structure. From those models the individual, group, dyadic, and complex trauma model, respectively, that had been tested most extensively was included, as it was believed that these models were most likely to have been evaluated for non-PTSD outcomes. One non-US model was also included. This model was developed in Great Britain and had relatively extensive empirical evidence. For each treatment model the published literature was reviewed; treatment developers were also contacted to

determine whether unpublished data were available with regard to the target domains under examination for this review.

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### **Evidence-based models included in the review**

The following section provides a brief description of the established evidence-based treatment models included in the review.

#### **Child–parent psychotherapy**

Child–parent psychotherapy (CPP) is a relatively long-term (50 sessions) dyadic child–parent model for very young children (0–6 years old) that helps child and parent better understand the impact of trauma on each [10]. Joint sessions target changing maladaptive behaviors, supporting developmentally appropriate interactions and guiding child and parent in creating a joint narrative of the traumatic events while working toward their resolution. Specific domains that are targeted include play, sensorimotor disorganization and disruption of biological rhythms, fearfulness, recklessness, self-endangering and accident-prone behavior, aggression, punitive and critical parenting and the relationship with the absent parent.

#### **Cognitive behavioral interventions for trauma in schools**

CBITS is a 10-session school-based group model based on the need to develop a public health approach to address the large number of traumatized children, particularly minority and low-income children who would not otherwise access effective services; the impact of trauma on learning and academic performance making school the logical environment in which to address and heal these problems [11]. Specific CBITS treatment components include psychoeducation, parent education sessions, relaxation skills, affect modulation skills, cognitive coping skills, individual breakout sessions in which each child creates a trauma narrative and processes maladaptive cognitions about this narrative, in-vivo mastery of trauma reminders, and enhancing safety and future development.

#### **Cognitive behavioral therapy for posttraumatic stress disorder**

Cognitive behavioral therapy for PTSD (CBT-PTSD) is a 10-session individual model for children exposed to single-incident traumatic events [12]. Developed and tested in Great Britain, CBT-PTSD includes psychoeducation, imaginal exposure, cognitive restructuring, integration of the cognitive restructuring into the reliving, in-vivo exposure, stimulus discrimination regarding trauma reminders, direct work with nightmares, image transformation techniques, behavioral experiments, and work with parents that includes parent–child sessions as needed.

#### **Structured psychotherapy for adolescents responding to chronic stress**

Structured psychotherapy for adolescents responding to chronic stress (SPARCS) is a 22-session group intervention specifically designed to address the needs of adolescents (age 12–18 years) who have experienced chronic trauma such as interpersonal violence, community violence, life-threatening illness, etc.), including those living with ongoing stress [13]. SPARCS focuses on six primary domains of functioning, including problems with emotion regulation and impulsivity, self-perception, relationships, alterations in attention/consciousness, and struggles with their own purpose and meaning in life.

#### **Trauma-focused cognitive behavioral therapy**

Trauma-focused cognitive behavioral therapy (TF-CBT) is a 12–15-session components-based individual child/conjoint parent treatment model for children ages 3–18 who have experienced diverse trauma types including interpersonal traumas and multiple traumas and their parents or caretaking adults [14]. TF-CBT components are summarized by the acronym PRACTICE: psychoeducation, parenting component, relaxation skills to address biological dysregulation, affective modulation skills, cognitive coping and regulation skills, trauma narration and cognitive processing, in-vivo mastery of trauma reminders, conjoint child–parent sessions and enhancing safety and future developmental trajectory.

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### **Domains evaluated**

In consideration of the new criteria proposed for DSM-V PTSD and the proposed developmental trauma disorder criteria, the following domains were evaluated for each model:

- (1) Affective dysregulation: reviewed studies included assessment of depression, anxiety, fear, and/or internalizing symptoms.
- (2) Behavioral dysregulation: reviewed studies included assessment of externalizing behaviors, sexualized behaviors, total behavior problems, placement disruption, and/or running away behaviors.
- (3) Cognitive dysregulation: reviewed studies included assessment of dissociation, shame, self-blame, loss of trust, alienation (feeling different), diminished credibility, being permanently damaged, and feeling vulnerable in a dangerous world.
- (4) Relational dysregulation/relatedness problems: reviewed studies included assessment of parent–child attachment, parenting skills, and parental support of child and parental emotional distress related to the child’s abuse as these related to children’s outcomes.

Because of the focus in the proposed developmental trauma disorder on early, chronic interpersonal trauma that occurs in the context of parenting disruption, the

review also designates trauma exposures for each study so that readers may discern potential relevance of findings to this population.

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## Results of the review

Since the purpose of this review is to examine to what degree current evidence-based treatments for child PTSD address other proposed outcomes for traumatized children, the findings of the review are presented according to these domains of functioning. All outcomes are from RCT unless otherwise noted.

### Affective dysregulation

CBITS resulted in significant improvement in depressive symptoms for children exposed to community violence [15] as well as in quasi-experimental studies for immigrant children exposed to community violence and children in New Orleans exposed to Hurricane Katrina, respectively [16,17<sup>\*</sup>]. Cognitive behavioral therapy (CBT) for PTSD documented significant improvement in depression and anxiety symptoms for children exposed to motor vehicle accidents or interpersonal violence or witnessing violence [12]. SPARCS documented significant improvement in anxiety and depression in an open trial [18]. TF-CBT resulted in significant improvement in depression [19,20], anxiety [19,21<sup>\*</sup>], fear [22,23], and internalizing symptoms [24] among children exposed to sexual abuse, domestic violence, and/or multiple traumas.

### Behavioral dysregulation

CPP documented significant improvement in total behavior problems among children exposed to domestic violence [25] and also significantly decreased behavioral problems and placement disruption among multiply traumatized children in foster care in a quasi-experimental study [26<sup>\*\*</sup>]. CBITS adapted for delivery by school personnel improved children's behavior problems in an open study [8<sup>\*\*</sup>]. SPARCS resulted in significant improvement in behavioral symptoms in an open study of chronically traumatized adolescents [18] and significant decreased behavioral problems, running away and placement disruption in teens in multiply traumatized foster care in a quasi-experimental study [26<sup>\*\*</sup>]. TF-CBT documented significant improvement in externalizing behaviors and sexualized behavior problems in preschool children experiencing sexual abuse [24], sexual problems in children experiencing sexual abuse [19], total behavior problems among multiply traumatized children experiencing sexual abuse [20], and also decreased behavior problems, placement disruption and running away in multiply traumatized children in foster care in a quasi-experimental study [26<sup>\*\*</sup>].

### Cognitive dysregulation

CBT for PTSD significantly improved posttraumatic cognitions such as self-blame, loss of trust, being perma-

nently damaged by the trauma, and being a fragile person in a dangerous world among children exposed to single traumas described above [12]. TF-CBT significantly improved dissociation for children experiencing sexual abuse [19] and significant improved shame and abuse-related alienation, loss of trust, and diminished credibility among multiply traumatized sexually abused children [20,27].

### Relational dysregulation

CPP for preschoolers significantly improved relationship expectations in abused preschoolers [28]. SPARCS showed significant improvement in interpersonal relationships in an open study of chronically traumatized adolescents [18]. TF-CBT improved parenting skills, parental support of children, and parental emotional distress about the child's trauma in multiply traumatized children exposed to sexual abuse [20], and improved parental support and emotional distress among parents of children aged 3–14 who had experienced sexual abuse [27,29]; improvement in these parental outcomes mediated children's recovery.

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## Summary of findings

The review of new psychotherapeutic treatments for traumatized children confirms that 1. new psychotherapeutic interventions continue to be developed and adapted for new settings and populations of trauma-exposed children and 2. the primary target symptom examined in these studies was PTSD, for which these new treatments are effective.

Despite the fact that the domains other than PTSD that this review examined are not codified in existing diagnostic criteria and would thus not be obvious targets of research attention, current child trauma psychotherapeutic treatment models have substantial evidence of efficacy in these domains. Cognitive dysregulation has support from two models, relational dysregulation has support from three models, while both affective and behavioral dysregulation have empirical support from four of the five models reviewed. Of course, lack of evidence does not mean lack of effectiveness. In most cases where evidence is lacking the model developers have not yet examined these outcomes. Some outcomes cannot feasibly be assessed for a particular model. For example, trauma-related cognitions are difficult to assess in preschool children and thus these outcomes will likely not be available for CPP. In other cases the outcomes have been examined but the numbers of participants were insufficient to provide adequate power to detect differences.

These findings should not be misinterpreted to suggest that there is no need to revise the current diagnostic criteria. They could strengthen the face validity of some

revisions. For example, the above domains were considered important enough that independent treatment developers included them as outcomes in addition to PTSD in several treatment studies. This lends face validity to the idea that traumatized children experience a multiplicity of psychological problems.

Regardless of future changes to DSM diagnostic criteria for traumatized children, the above review suggests that current treatments for child PTSD successfully address a broad variety of trauma-related problems. Evidence-based psychotherapeutic options for traumatized children are likely well positioned to address these children's challenging problems into the future.

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### References and recommended reading

Papers of particular interest, published within the annual period of review, have been highlighted as:

- of special interest
- of outstanding interest

Additional references related to this topic can also be found in the Current World Literature section in this issue (p. 680).

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