

Complex Trauma in Children and Adolescents: Evidence-Based Practice in Clinical Settings

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Complex trauma (CT) results from exposure to severe stressors that occur within the caregiver system or with another presumably responsible adult, are repetitive, and begin in childhood or adolescence. As a result, many of these children and adolescents experience lifelong difficulties related to self-regulation, relationships, psychological symptoms, alterations in attention and consciousness, self-injury, identity, and cognitive distortions. The aims of this article include the following: (a) to examine several representative approaches identified as treatments for children and adolescents exposed to CT with respect to similarities and differences; (b) to examine representative evidence of model effectiveness; (c) to discuss how these approaches are and/or could be implemented in clinical practice; and (d) to suggest research designs that would facilitate greater translation of effective treatment into clinical settings. © 2013 Wiley Periodicals, Inc. *J. Clin. Psychol.* 69:497–509, 2013.

Complex trauma (CT) or developmental trauma (a proposed disorder for the Diagnostic and Statistical manual of Mental Disorders Fifth Edition [DSM 5]) in children and adolescents has received considerable attention in the scholarly literature (e.g., Amaya-Jackson & DeRosa, 2007; Courtois & Ford, 2009) as well as through such organizations as the National Child Traumatic Stress Network (NCTSN) and the American Professional Society on the Abuse of Children (APSAC). Further, studies have been conducted identifying evidence-based treatments for children and adolescents exposed to traumatic events (e.g., Silverman et al., 2009), most of which focus on posttraumatic stress disorder (PTSD) rather than CT. Although CT symptoms may include posttraumatic stress disorder (PTSD) symptoms, especially in early stages in the development of complex symptoms, the two do not necessarily overlap with respect to function (D'Andrea, Ford, Stolbach, Spinazolla, & van der Kolk, 2012). Evidence-based treatments are only beginning to emerge that include CT as a target of interventions. Most are based on interventions originally developed for so-called simple or type I single incident trauma, as opposed to type II CT that typically involves exposure to repeated traumatic experiences over a prolonged period of time, often perpetrated by a trusted person(s) in the child or adolescent's life (Cohen, Mannarino, & Deblinger, 2006).

There are several treatment models that explicitly state as their goal the treatment of CT with children and/or adolescents (e.g., Arvidson et al., 2011; DeRosa & Pelcovitz, 2006). For the most part, evidence of effectiveness of these treatments is based on preliminary, single group pretreatment to posttreatment designs. A few models cite evidence employing randomized controlled trials (RCT; e.g., Ghosh Ippen, Harris, Van Horn, & Lieberman, 2011; Najavits, Gallop, & Weiss, 2006). Although some authors have addressed the issue of evidence-based practice in the treatment of CT (e.g., Amaya-Jackson & DeRosa, 2007), there is a dearth of literature comparing treatment model components, the degree to which each model targets CT, and the evidence for effectiveness of these models. The purpose of this article is four-fold: (a) to examine several representative approaches identified as treatments for children and adolescents exposed to CT with respect to similarities and differences; (b) to examine representative evidence of model effectiveness; (c) to discuss how these approaches are and/or could be implemented in clinical practice; and (d) to discuss research designs that could advance the field in translating effective treatment into clinical settings.

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We face several challenges in our attempt to accurately address these issues. First, CT includes many and diverse symptoms that cut across numerous DSM-IV diagnoses; thus, comorbidity defines the disorder, making clear diagnosis challenging (D'Andrea et al., 2012). Second, most CT research has been conducted in field-based settings where RCTs are difficult to implement. Third, clinicians work with a wide range of symptoms and severity of cases, from a single incident to severe levels of CT; thus, isolating CT cases for study is difficult. Fourth, because of the wide variation in symptoms, severity, treatment lengths, treatment targets, and specific interventions, testing the effects of one standard treatment is difficult. Last, caregiver mental health may contribute to CT symptoms but they may not be committed to treatment for themselves or their children. Thus, much CT research is considered preliminary. We hope to provide a clear and accurate evaluation of the current state of selected CT treatment models.

Complex Trauma

CT results from exposure to severe stressors (e.g., emotional, physical, sexual, neglect, and witnessing family violence) that most often begin in childhood or adolescence, occur repeatedly over time, and are perpetrated within the caregiving system or by other adults who typically are expected to be the source of security, protection, and stability (Courtois & Ford, 2009). Medical trauma and traumatic loss/grief also are included. CT incidents often occur in an ongoing chaotic environment with extreme stress. As a result, many of these children and adolescents experience lifelong difficulties related to self-regulation, relationships, psychological symptoms (depression, anxiety, and dissociation), addiction, alterations in attention/consciousness, self-injury, identity, and cognitive distortions.

Cook et al., (2005) place CT symptoms into seven domains of impairment: attachment, biology, affect regulation, dissociation, behavioral control, cognition, and self-concept. As CT often occurs within the caregiver system, it disrupts a child's core sense of self and other relationships, often expressed in mistrust of others. This also makes children more vulnerable to future trauma exposure and cumulative impairment. As the number and types of CT stressors increase, so do the number and complexity of symptoms experienced (Finkelhor, Ormrod, & Turner, 2007). Further, because CT experiences may take place within the caregiver system, the child may be cautioned or threatened to conceal the abuse, creating even more conflict, guilt, and a sense of betrayal. Regular or intermittent CT can create a near continual state of anxiety, hypervigilance, and expectation that the world is unsafe and chaotic.

For this review, exposure to CT was the criterion for inclusion rather than a cluster of specified CT symptoms, a decision based on the lack of a universally held diagnosis of complex traumatic stress. Also, we examined only those representative approaches that were identified as treatments for CT in the child and adolescent trauma literature. Finally, our goal was to evaluate several representative evidence-based approaches, not to identify all treatments for CT or to classify the treatments as either "well established" or "probably efficacious" based on a strict evaluation of the methodological rigor of the research.

Complex Trauma Treatment Models

The following discussion includes representative treatment models for three age groups: early childhood (aged 0–5 years), elementary school/middle childhood (aged 6–12 years), and adolescence (aged 13–17 years). These age designations are based on developmental stages but do not necessarily distinguish between treatment models as some approaches overlap in age categories (e.g., Trauma Focused-Cognitive Behavioral Therapy [TF-CBT]; aged 3–17 years) with adjustments based on development. Our purpose is to highlight developmental differences and adjustments necessary in treatment to increase the probability of success.

Early Childhood

Early childhood is a time when humans are most vulnerable to the impact of trauma, especially when it occurs within the family or with trusted caregivers. Children are developing a foundation

for communication, relationships, empathy, self-awareness, self-regulation, and a basic sense of initiative and self-efficacy. A safe, predictable environment facilitates the normal development of all these capacities. Inconsistency in their provision by a caregiver undermines healthy child development. Exposure to frequent and intense traumatic experiences such as physical and sexual abuse increases a child's experience of high levels of affective and physiological arousal and a tendency to interpret even the smallest demands as dangerous and anxiety producing. These children spend an inordinate amount of time in a hypervigilant state, focused externally, and often eventually disconnect emotionally as a means to cope. Continuation of these coping strategies throughout early childhood often leads to the development of rigid and circumscribed means of managing distress. Because co-regulation of emotions is often critical and because attachment with a caregiver is the optimal environment for acquiring this capacity, participation of a committed caregiver is a crucial component in treating CT (Blaustein & Kinniburgh, 2011).

Model Summaries

Several treatment models for young children have at least preliminary data suggesting they show promise for treating CT. Three of these are child-parent psychotherapy (CPP; Ghosh Ippen et al., 2011), Attachment, Self-Regulation, and Competency Model (ARC; Arvidson et al., 2011), and Intergenerational Trauma Treatment Model (ITTM; Copping, Warling, Benner, & Woodside, 2001). Only CPP has been examined by means of RCTs. ARC and ITTM each have published preliminary data, using a single group, pretest/posttest design.

Child-Parent Psychotherapy

CPP was developed for children aged birth to 6 years who have been exposed to multiple traumas such as parental violence and other trauma experiences. The overriding goal of treatment is to strengthen the parent-child relationship by enhancing the capacity of the parent to provide a sense of safety and attachment, to enhance the child's affect regulation, and to improve the child's cognitive, behavioral, and social functioning. Contingent on the child's developmental level, a trauma narrative is constructed involving both parent and child. It is important that the caregiver understands the meaning of any traumatic reminder in the child's environment and removes it or, if not possible, desensitizes the child through gradual exposure.

For example, a 4-year old child witnesses his mother and father's frequent verbal and/or physically aggressive encounters. These encounters are loud, hostile, and frightening to the child. The child reacts with intense and dysregulated affect. The parents mistake the child's traumatic response as expressions of defiance and disrespect and, in turn, react to the child with equally loud, hostile voice tones to correct him. Their correction results in intensified dysregulated behavior from the child. The child reacts in this manner any time the parents (or other adults) are talking in a loud tone whether hostile or not, or whether the parents are together or separate. The child responds in like manner at day care when adult staff raise their voices. It would be important for the parents to understand the effect of this dynamic on the child and then alter their hostile/aggressive behavior in the presence of the child as well as desensitize the child through gradual exposure to loud noise in other settings where this may occur with other adults.

Play therapy is also a component of treatment and provides an opportunity for the child to reenact the traumatic event (as in the above example) and develop a coherent trauma narrative within the parent-child context using toys, drawings, or other expressive means. This is an opportunity to express negative emotions such as anger in a safe, supportive environment provided by the parent and to learn appropriate means to modulate anxiety resulting from the trauma. Parent education is also included.

The treatment is modulated based on type of trauma and the child's age or developmental status. With infants, treatment focuses on enhancing parents' understanding of how the child's and their own experience of the traumatic event (including each parent's history of trauma) likely affects the child's functioning. Older children are more active in the treatment process,

especially in play sessions with the parent. Typically, parent-child dyads attend up to 50 weekly sessions.

Several RCT studies have been conducted with CPP, but only one examined its effectiveness with children exposed to CP ($n = 75$; Ghosh Ippen et al., 2011). CPP was compared with individual psychotherapy plus case management for 3–5-year-olds with four or more traumatic and stressful events (TSE). TSEs included physical abuse (29.3%), sexual abuse (12%), witnessing domestic violence (97.3%), separation from a caregiver (100%), and caregiver mental illness (88%). Children with four or more TSEs and their mothers receiving CPP showed significantly greater improvement in symptom reduction (e.g., depression, PTSD symptoms) than the control group. Mother's psychological status was not a target of treatment. The authors suggested that enhancing the parent-child relationship with CPP improves not only the child's mental health but also the mother's. The authors concluded that CPP is effective in reducing not only PTSD but also symptoms associated with exposure to complex trauma.

Attachment, Self-Regulation, and Competency Model

The ARC model has been developed in cooperation with NCTSN, expressly for the purpose of treating children and adolescence who have experienced CT. The ARC model was developed as a component-based framework, rather than a structured, lock-step treatment model, to help therapists organize a specific treatment for each child. We will focus on the application with children in early childhood.

Treatment focuses on four areas, with each area targeting numerous "building blocks": caregiver attachment (e.g., caregiver affect management, attunement to child); child's self-regulation (e.g., affect identification and modulation); child's competency (executive functions); and trauma experience integration (e.g., traumatic memories and reminders; Blaustein & Kinniburgh, 2010). Specific strategies are suggested for each building block. Depending on the degree of impairment and resilience factors, the number of sessions ranges from 12 to 52.

The ARC model is informed and grounded in attachment theory, child development theory, traumatic stress theory, and resilience theory. The order and application of these theories is modified according to the unique characteristics of the child and caregiver context. Interventions focus at the individual, family, and system levels with a range of treatment modalities including groups, family therapy, parent workshops, and home-based treatments.

For example, parents with emotional dysregulation problems are taught focused breathing and calming self-talk (caregiver affect management). Their ability to self-manage affect is then related to appropriate supportive responses to their child (e.g., attunement). Parents then are provided with an opportunity to practice reflective listening with the child as a means of developing attunement skills. Developmental adjustments are incorporated into intervention strategies. Cultural considerations are based on the unique context factors related to each child, caregiver, and living context.

Several single group, pretest-posttest pilot studies have been conducted with children exposed to CT. In one study with children (aged 3–12 years), pretest/posttest measures on the Child Behavior Checklist (CBCL) revealed significant improvements for 21 children who had completed treatment (average of 50 sessions; Arvidson et al., 2011).

ITTM

The ITTM was designed to address complex CT in children employing CBT methods (e.g., exposure to traumatic event, cognitive processing), with a primary focus on improving caregivers' abilities to respond therapeutically to their child and to function as the major agent of change for their child. Therefore, ITTM emphasizes building capacity for the caregiver to directly address the child's trauma-related symptoms. The effects of parents' own traumatic experiences are considered. The ITTM model includes 21 sessions for children aged 3 to 18 years.

ITTM is presented across three different phases. Phase A, Trauma Information Sessions, comprises six 90-minute weekly group sessions attended by the children's caregivers. Sessions focus on issues related to trauma, attachment, caregiver self-regulation, empathy for their child,

importance of caregivers response to children's trauma, and CBT. Phase B, Caregiver Treatment Sessions, includes eight individual sessions with the caregivers. Session content includes helping caregivers process traumatic or high-impact childhood experiences in their own lives. CBT is employed to help caregivers identify, deconstruct, and reconstruct faulty beliefs about their trauma/distressing experience followed by understanding how their own trauma theme might affect the life of their child.

For example, a caregiver may have been abused as a child and as a result either avoids the topic when his or her 6-year-old abused child asks questions about abuse, or lectures the child about protecting himself or herself against future risks of abuse, but without listening and responding to the child's intended message (misattunement). In this case, the therapist would explore with the parents themes about their own abuse (e.g., abandonment, avoidance) and any distorted beliefs resulting from their abuse, such as, "abuse is best not discussed" or "once abuse happens you just put it behind you and move on." These beliefs are examined and replaced with more accurate, functional ones, such as "sometimes it's necessary to talk about traumatic experiences as a means to resolving them." Finally, the caregiver and therapist explore how the distorted beliefs may be affecting his or her reactions to the child and discuss new, more effective ways to interact with the child, such as empathic reflective listening. Interventions also may include teaching caregivers emotional regulation skills.

Additionally, caregivers are expected to spend a minimum of 3 hours per week of one-on-one time with their child. Anticipated outcomes include, for the caretaker, increased empathy and emotional regulation, and for the child, an enhanced sense of safety and security, as well as a reduction of problematic behaviors and symptoms.

Phase C, Child, Caregiver, and Therapist Sessions, comprise three to eight conjoint sessions. During the first part of the session, the caregiver observes the therapist work with the child in reconstructing the traumatic experience (e.g., sand tray and/or drawings) and cognitive processing of the traumatic experience. In the final part of the session, the therapist and caregiver meet alone and process the child's experience with the therapist. More severe cases may continue beyond the 21 sessions with more focused work on interactions between the child and caregiver.

Although several research projects using this model are currently ongoing, one single-group study related to CT has been conducted (Copping et al., 2001). It examined 27 families who completed the two-session model and found significant pretest to posttest improvements in children's conduct and social relations and caregiver depression, at posttreatment.

Application

Of all three models, only the CPP was developed exclusively for children aged 0–6 years. ARC and ITTM covered a developmental range from early childhood through adolescence. All three models emphasize the parent-child relationship as the most crucial vehicle for resolving a child's CT, thus being consistent with developmental needs in early childhood. Comparing the three treatments, only CPP places primary focus on direct intervention with parent-child dyad (e.g., psychoeducation and play). Of the three approaches, only CPP is geared toward infants and toddlers exposed to CT making it the likely treatment of choice for children aged 0–3 years. All three approaches focus on the caregivers' provision of a secure attachment and skills to enhance the child's ability to self-regulate, which is most critical for early childhood trauma, with CPP and ARC conducting more direct parent-child work than ITTM. Thus, if a therapist believes a greater focus should be placed on the parent-child dyad, then CPP and ARC should be considered. If the caregiver has an unresolved trauma history that interferes with their ability to respond therapeutically to their child, ITTM may be the treatment of choice. Of course, the focus on caregivers' history could be combined with either CPP or ARC models.

Both the CPP and ARC models suggest up to 50 weekly sessions. If time is more limited, ITTM is a 21-session program with session number extensions as necessary if all three programs are deemed equally appropriate for a specific case. Only CPP and ARC adjust interventions to diverse populations.

Elementary School/Middle Childhood

During this stage of development, children are expanding their universe beyond home to include the school, community activities, peers, and other extra-family settings. Children are continuing to expand and refine their view of themselves and others, as well as developing the lens through which they will interpret their world of self, relationships, and play activities. At this stage, trauma disrupts peer relationships, school achievement, and a sense of self. If trauma exposure occurred in early childhood, disrupting a secure relationship with parents, it may impede their development of interpersonal skills and comfort interacting and trusting peers, parents, and other adults in middle childhood. Trauma also may negatively affect their sense of self-efficacy, self-regulation, attentiveness, and frustration tolerance (Blaustein & Kinniburgh, 2010). Deficits in any or all of these areas can undermine a child's level of confidence and competence in school and with peers, compromising a sense of self worth. Such children often lack flexibility interpersonally and in problem solving. They also may lack a sense of inquisitiveness as they are more focused on self-preservation and safety.

Model Summaries

There are few treatment models expressly for elementary school/middle childhood children. Two promising models for treating CT include Integrated Treatment of Complex Trauma for Children (ITCT-C; Lanktee & Briere, 2008) and Real Life Heroes (RLH; Kagan, Douglas, Hornik, & Kratz, 2008). Both models have published preliminary results, using a single group, pretest/posttest designs, or nonrandom assignment group comparison.

ITCT-C

ITCT-C was developed primarily for children aged 8–12 years who have been exposed to CT. Number of sessions vary according to the needs of each child, with the average number of sessions ranging from 16–36. ITCT-C is multimodal, component-based, and assessment-driven and allows for therapist flexibility and creativity in its implementation, based on the assumption that treatment should be adjusted to the unique needs of each child case. ITCT-C draws on the concepts of CT theory, attachment theory, CBT, and the Self-Trauma model. The authors emphasize the importance of a strong therapeutic alliance with the child and caregivers for effective treatment, especially when processing traumatic experiences (Lankton & Briere, 2008).

ITCT-C involves several components such as ensuring safety, affect regulation training, titrated exposure, cognitive therapy, and relationship processing. As CT is associated with disruption in primary attachment, this theme permeates the treatment process. These components are adjusted to each child's needs, typically beginning with safety and self-regulation training followed by trauma processing and cognitive work. Stages are flexibly implemented.

For example, a child may be in therapy due to long-term sexual abuse by a stepfather. However, with the stepfather removed from the home, the mother struggles to maintain appropriate structure and consistency with the abused child and two other siblings. The lack of coherent structure and chaos in the home only adds to the abused child's anxiety and withdrawal behavior. Therefore, the therapist may conduct parent training and/or structural family therapy to support the mother in implementing appropriate boundaries and providing consistency in the family prior to beginning focused trauma therapy with the abused child.

Posttraumatic stress and related symptoms tend to be a focus early in treatment to facilitate the exploration of emerging CT issues (e.g., attachment disruption and dysregulation). Titrated exposure and trauma processing are implemented in a developmentally sensitive manner with a balanced focus on increasing affect regulation, self-esteem, and self-efficacy.

Child-therapist individual sessions comprise a major part of therapy but individual work with caregivers (e.g., parent education) parent-child sessions, family sessions, and group therapy also may be included. The authors hold that as children move into middle childhood and with increasing age, more individual work is appropriate as their parents' presence may inhibit responses. In some instances, ITCT-C is conducted in school settings in a more time-limited

manner (e.g., 12 sessions). ITCT-C is culturally sensitive and has been implemented a number of diverse groups including African Americans, Latino Americans, Asian Americans, and Pacific Islander Americans.

Lanktree et al. (in press) studied 151 multitraumatized, socially marginalized children who received ITCT-C. Based on a one-group, pretest-posttest design, their results indicated significant reductions in anxiety, depression, posttraumatic stress, anger, dissociation, and sexual concerns, with longer time in treatment associated with greater progress.

Real Life Heroes

Real Life Heroes (RLH) is a relationship-based approach drawing from research related to traumatic stress, attachment, and complex trauma. It typically spans 6 to 18 months of weekly sessions. It utilizes CBT and psychoeducation for treating school-aged youth (aged 8–12 years) with posttrauma symptoms along with CT symptoms. Interventions focus on strengthening children's resiliency and resources emphasizing three elements: emotional regulation, attachments, and life story integration. Goals include enhancing safety, repairing attachments and enhancing caregiver attunement, building capacity to process and integrate trauma memories, and restoring hope. Skill development focuses on the following: nonverbal processing, relationships, problem solving, affect recognition and regulation, adaptive coping, concentration and attention, mindfulness, and cognitive restructuring. These are acquired using nonverbal creative arts, narrative interventions, and gradual trauma exposure (Kagan, 2004). Caregiver and child are included in most sessions.

Interventions revolve around an activity-based workbook and manual that uses the metaphor of a heroic quest to structure a phased-based intervention curriculum. The Practitioners Manual includes strategies, sequenced procedures, and related worksheets to address (a) safety issues, (b) strengths and relationships, (c) self-regulation, (d) trauma memory processing (TF-CBT), and (e) prevention and management of attachment disruptions. Children are helped to write a new life narrative, with a beginning, middle, and end, noting movement through difficult times as they move toward improving their lives. Additional stories revolve around people of the same ethnic heritage who have overcome adversity and people in the child's life who have provided support. Stories allow children to make sense of traumatic experiences, grieve losses, and move on.

Kagan et al. (2008) present a single-group pilot study with 41 children and caregivers. Seventy-five percent of the children had three to six traumatic experiences. Results indicated significant reductions in trauma symptoms, child problem behaviors, and greater secure attachment to caregivers. Longer time in treatment produced greater progress.

Application

Particular strengths are that both programs were developed for middle childhood and to accommodate for cultural differences. RHL largely works with the child and caregiver together, whereas ITCT-C largely focuses on children and parents separately, although family therapy and parent-child work typically are a part of treatment. Further, ITCT-C offers a 12-week school-based group model for children exposed to domestic violence, traumatic loss, or community violence. The construction of a new life narrative is a particular strength of RHL and would be a therapeutic addition to any CT treatment. An apparent weakness for both models based on middle childhood is a lack of prescribed peer group work as CT often disrupts peer relationships and age-appropriate communication skills. Peer groups could be added following the core treatment for each model.

Adolescence

Adolescence is a time of significant changes across development domains. In particular, adolescents are developing perspective-taking skills, individuating in the context of relationships with peers and adults and expanding coping skills. As perspective taking about the past, present,

and future is still developing, they often make hasty decisions. Exposure to CT can exacerbate affect and behavioral dysregulation, poor judgment, decision making, and underdeveloped coping skills. Attempting to cope with CT may lead to extremes, such as peer disconnection and isolation, over-control, and harmful coping strategies, such as alcohol, drugs, self-mutilation, and high-risk sexual acting-out behavior. If the effects of trauma are continuing from childhood, an already fragile sense of self can become increasingly fragmented, creating greater confusion and dependence on varying degrees of dissociation to cope with life (Blaustein & Kinniburgh, 2010).

Model Summaries

There are more trauma treatment programs for adolescence than the other two developmental periods. However, few explicitly state treatment of CT as their primary goal. We will review three programs that either clearly state CT as their treatment target (TF-CBT; Cohen et al., 2012; Structured Psychotherapy for Adolescents Responding to Chronic Stress [SPARCS]; DeRosa & Pelcovitz, 2006) or that target participants who report multiple trauma experiences over time (Seeking Safety [SS]; Najavits et al., 2006). Currently, only SS has a published RCT to support its effectiveness. It is the only dual diagnosis program (trauma and substance use disorder [SUD]) for adolescence. TF-CBT and SPARCS have preliminary support from nonexperimental studies with CT cases. Several other treatments are used extensively with adolescent populations. However, space does not permit a review of these programs: Cognitive Behavioral Intervention for Traumatized Students (CBITS; Kataoka et al., 2003), Trauma Affect Regulation: Guide for Education and Therapy (TARGET; Ford et al., 2012), Trauma Systems Treatment (TST; Saxe et al., 2005), and Skills Training in Affect and Interpersonal Regulation (STAIR; Cloitre, Cohen, & Koenen, 2006).

TF-CBT

TF-CBT is probably the best known approach in treating children and adolescents exposed to trauma and is the only such program that is considered *well established with children and adolescents*. The authors acknowledge that though their research has included children and adolescents with CT, they have not conducted any systematic research with this population (Cohen et al., 2006). However, a recent article by Cohen, Mannarino, Kliethermes, and Murray (2012) addresses the application of TF-CBT to CT.

TF-CBT was originally designed for children and adolescents (aged 3–18 years) who have experienced a traumatic experience and, as of recently, CT. Therapists work both individually with parent and child as well as conjointly. TF-CBT employs a phase-oriented treatment, typically keeping with the following order based on the acronym PRACTICE (Cohen et al., 2006):

1. Psychoeducation for parent and child, and parenting skills
2. Relaxation skills
3. Affective modulation
4. Cognitive coping and processing
5. Trauma narrative
6. In vivo master of trauma reminders
7. Conjoint child-parent sessions
8. Enhancing future safety and development

Development of anxiety management skills and learning cognitive coping skills are viewed as essential prior to construction and processing the trauma narrative(s). After trauma processing, the therapist assists the child in reexamining inaccurate or unhelpful thoughts/beliefs related to the trauma. The model also includes working with traumatic grief. The primary goals of treatment are to resolve the effect of a traumatic experience(s) and related symptoms. TF-CBT has the strongest empirical evidence of any other treatment model in successfully addressing these symptoms, with multiple RCTs including diverse populations.

Recently, Cohen et al. (2012) suggested several adjustments to TF-CBT to more effectively address the unique aspects of CT (TF-CBTCT). First, they suggest extending the number of sessions from 8–16 to 25. Second, they advise placing an even greater emphasis on the therapeutic alliance, as the relationship itself is often related to the perpetrator. Third, they now suggest that safety issues are addressed in the initial stages of treatment rather than the final stages, as historically was the case with TF-CBT. In addition, because youth exposed to CT often struggle with self-regulation, they suggest that the number of sessions dedicated to developing coping skills should be increased proportionally from one third to one half of the sessions. A fifth suggestion—based on the severity of CT symptoms compared to less complicated trauma—is that exposure to CT themes should be introduced gradually, contingent on the youth's ability to tolerate anxiety.

Further, they now advise that therapy should focus more on trauma themes rather than particular traumatic incidents because of the larger number of incidents. Trauma themes often are conditional, such as “people will always hurt me no matter what I do,” or “why should I believe anybody, they always leave me anyway.” Because of the often-extended nature of CT, the trauma narrative often becomes a life narrative, beginning as early as the adolescent can remember and carried on into the present with the trauma theme intertwined throughout the narrative. The life narrative includes relevant thoughts, feelings, situations, and behaviors as well. Finally, they now suggest that time should be extended in the final consolidation phase as well as incorporating traumatic grief work.

Cohen et al. (2012) identify three studies based on the use of TF-CBTCT, one of which was published—Weiner, Schneider, and Lyons (2009). TF-CBTCT was compared with CPP, SPARCS, and Systems of Care (SOC) treatment. All three significantly reduced symptoms compared with SOC. Compared with SOC, TF-CBTCT resulted in significantly greater reduction in emotional and behavioral problems and PTSD symptoms. Also, it was significantly more effective in preventing placement disruption and running away.

SPARCS

SPARCS is a group intervention program comprising 16–22 sessions and was developed expressly for treating CT adolescents. The program focuses on adolescents who may be currently living in a highly stressful environment and struggling with some of the following problems: affect regulation, distorted self-perception, relationships, dissociation, numbing and avoidance, finding purpose and meaning in life, and assuming a future orientation. Treatment revolves around the Four C's: cultivate awareness about self and others, cope more effectively with stressors, connect with others to form supportive relationships, and create meaning and purpose in life as a means of enhancing self-efficacy (DeRosa & Pelcovitz, 2006).

SPARCS assumes that adolescents' behavior represents their best attempts to deal with extremely distressing situations. Treatment is present-focused and attempts to build on existing strengths. Interventions are based on CBT and dialectical behavioral therapy and include mindfulness, learning problem solving, meaning making, relationship building, communications skills, distress tolerance, and psychoeducation. SPARCS does not include trauma exposure (trauma narrative), but each person's trauma experiences are addressed within the context of how they are affecting each person's behaviors and coping.

Groups are comprised of 6–10 members of single or mixed gender. Examples of group topics are as follows: (a) manage your emotions so they don't manage you, (b) understand how your body reacts to stress, (c) how to get what you want by improving your communications skills, (d) build the support you want, and (e) create meaning for the past and purpose for the future. The group setting is based on the needs of adolescents to develop independence from their parents and form peer support.

DeRosa and Pelcovitz (2006) report on a single group pretest to posttest pilot study with 62 participants exposed to CT (22 sessions). Results indicated significant reductions of intrapersonal distress, interpersonal relations, behavioral dysfunction, and PTSD symptoms.

SS

SS was developed based on CT populations (i.e., chronic, severe, and comorbid, with multiple life burdens), but has also been implemented more broadly with singly diagnosed individuals with a wide range of severity (Najavits, 2009). The focus of the model is to help build safety in relationships, thinking, and action (interpersonal, cognitive, and behavioral domains), as well as attend to case management needs (engaging clients in additional treatments that may aid their recovery). It focuses on safe coping skills and psychoeducation, emphasizing the link between trauma and addiction (or can be used with either alone). It was developed for adults but has been used extensively with adolescents, and an adolescent version of the manual is in development. SS is a stage 1 model that builds stabilization and safety, and it can be used early in recovery as well as ongoing.

The treatment is a flexible, present-focused program that can be employed with groups or individuals in outpatient, inpatient, or RTS. SS is based on five principles: (a) increasing safety; (b) integrating treatment of trauma and substance abuse; (c) inspiring ideals to replace the beliefs associated with trauma and substance abuse; (d) attending to cognitive, behavioral, and interpersonal issues, as well as case management; and (e) attending to the clinician's experiences (e.g., countertransference, self-care) (Najavits, 2002). SS is a highly public, health-oriented model, with no specific requirement for training (although training is available), and the ability to be conducted by any staff (with no specific degree or background required); it has also been piloted in peer-led format with adults.

The curriculum offers 25 different topics related to safety. However, 25 sessions are not required; clinicians are encouraged to do as much as time allows, expanding or contracting as needed based on length of stay. Each topic represents a safe coping skill, in various domains: cognitive (e.g., compassion, creating meaning), behavioral (e.g., grounding, coping with triggers), interpersonal (e.g., honesty, asking for help), and case management.

Sessions includes psychoeducational materials as well as experiential exercises. For example, topic number 3, "PTSD: Taking Back Your Power (Cognitive)," includes handouts such as "What is PTSD?" "The Link Between PTSD and Substance Abuse," and "Using Compassion to Take Back Your Power." Participants are provided accurate information about PTSD in a compassionate and understanding manner. Topic number 4, "Detaching from Emotional Pain: Grounding (Behavioral)" teaches participants "grounding" strategies to deal with their emotional pain. The strategies are demonstrated followed by practice in-session. Grounding helps participants shift their focus from internal negative feelings to the external world. Interventions are based on CBT and interpersonal therapy. SS does not focus on trauma narratives, in keeping with the stage-based concept of treatment endorsed by trauma experts (Cloitre et al., 2011; Herman, 1992).

Najavits, Gallop, and Weiss (2006) conducted a RTC with 33 outpatient adolescent females with PTSD and SUD, and primarily substance dependence, the most severe form of SUD. Most of the participants had experienced multiple traumas (e.g., sexual abuse 87.9%; disaster/accident 81.8%; and physical abuse 72.7%) and had onset of trauma experiences as early as 4 years (mean = 8.75 years). They were randomly assigned to either SS plus treatment as usual (TAU; $n = 18$) or TAU ($n = 15$). SS participants reported significantly better outcomes related to substance use, trauma-related symptoms, cognitions related to PTSD and SUD, and psychiatric functioning.

Application

All three approaches—TF-CBTCT, SPARCS, and SS—state explicitly in their manuals that their models were developed or modified to treat CT. Further, SS and SPARCS do not focus on trauma narrative processing as a primary goal of treatment as does TF-CBTCT. Rather, SS and SPARCS focus on developing emotional and behavioral coping strategies, tolerance building, and enhancing interpersonal support. SS adds the critical component of substance abuse treatment. The choice of whether and when to do trauma processing needs to be a careful one, assessing

client readiness, context, and capacity. If therapists identify that a client is ready and interested in trauma narrative work, this can be done as part of TF-CBTCT, or it can be done concurrently or sequentially in relation to SS or SPARCS.

Also, caregivers are integral in TF-CBTCT, addressed to some degree in SS (as currently written, they are invited to certain sessions, and the adolescent version of the manual has an increased focus on caregivers). Caregivers are not addressed in SPARCS. A noteworthy distinction for the SPARCS and SS programs is that their participants may still be living in stressful, even traumatic environments during treatment, without other options; thus, these models are more present and action-oriented. In these cases, SPARCS and SS may be the treatments of choice. However, therapists may have greater difficulty tailoring interventions to individuals in groups, although the efficiency of the group setting is a higher priority. Given that youth with CT symptoms often self-medicate with substances, SS is clearly the treatment of choice in such cases and may be integrated with one of the other two approaches. Finally, all three models are sensitive to diverse populations.

Research Design for Clinicians

As is obvious from this limited review, consistency and rigor in studies examining treatment for CT are lacking and largely for the reasons stated earlier. Another difficulty in conducting meaningful research is the need to tailor interventions to each individual as opposed to providing a one-size-fits-all, set session number manualized treatment (Arvidson et al., 2011). The response by each child and family within their particular culture to CT varies greatly from case to case; however, group designs are standard. Further, emerging protocols indicate that multiple approaches and modalities are necessary to treat CT symptoms (Lankton & Briere, 2008). As a result, a need exists to examine treatment for single or small N cases, based on evidence-informed interventions tailored to the particular situation.

Single-case, time-series designs with multiple observations before and after interventions could provide clinicians and researchers a perspective of treatment that is lacking with RCT. Large N designs obfuscate the fine-grain perspective that is necessary to identify change processes with CT cases. The characteristic shifts in mood/behavior and states of consciousness in and outside of sessions represent a critical phenomenon to understand and address effectively in session. Therapists are keenly aware of such phenomena, but few studies have examined them either moment-by-moment in session or from a day-to-day perspective. A series of single subject or small N designs might identify crucial dynamics and patterns across several cases and inform RCT. Further, such research likely would be welcomed by clinicians working with this population. Although the particulars of such research is beyond the scope of this article, several sources exist that can provide direction in both conducting and analyzing such data for researchers and clinicians alike (e.g., Borckardt et al., 2008).

Conclusions

Effective treatment of CT symptoms in children and adolescents has received prominent visibility in the psychotherapy literature. As has been noted in other sources (Courtois & Ford, 2009), many excellent treatment models exist and are being implemented with thousands of children and adolescents. In closing, we offer a few distinctions of emerging CT treatment models based on our review: (a) CT treatment lengths tend to be longer (e.g., 20–52 sessions) than models for PTSD because of more severe symptoms; (b) with a majority of CT models, caregiver involvement is integral at various points in treatment especially for children; (c) building self-regulation and anxiety tolerance skills are common to all approaches, either with the child or adolescent or through the caregiver; (d) although most models include a trauma processing component, a few do not (e.g., SS and SPARCS), which may indicate a growing trend that focuses on building self-regulation skills and coping methods rather than a focus on exposure interventions with a strong affective component (however, comparative research is lacking on this topic, especially for CT); and (e) most models included a wide range of interventions drawing

from attachment theory, cognitive behavioral therapy, trauma theory, family and ecosystemic theory, and existential elements.

It seems clear that the field of CT is in early stages, and there is a need to continue to elaborate and research treatment models and their evidence base. However, it is also apparent that there already have been significant great strides in moving the field toward these ends.

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