ARTICLE

Efficacy of Treatment for Child and Adolescent Traumatic Stress

Tisha L. Taylor, PsyD; Claude M. Chemtob, PhD

Background: Despite the expenditure of large sums of public monies to ameliorate the consequences of childhood trauma, little is known about the efficacy of treatment for traumatized children and their families.

Objective: To review the efficacy of treatment for child and adolescent traumatic stress.

Data Sources: An extensive literature search identified 102 studies addressing child and adolescent trauma treatment.

Study Selection: Only 8 studies met the minimal inclusion criteria of (1) using a comparison group and (2) including symptoms of traumatic stress as a treatment outcome.

Data Extraction: These studies are critically evaluated for adherence to standards of good efficacy research using formal criteria of treatment research quality.

Data Synthesis: Treatment for traumatic stress appears to lead to greater improvement than either no treatment or routine community care.

Conclusions: Child and adolescent posttraumatic stress disorder treatment research lags behind both adult posttraumatic stress disorder treatment research and other child treatment research. There is considerable need to establish a programmatic approach to developing evidence-based child trauma treatment. Barriers to conducting child trauma treatment research include sensitivity to the rights of victims and child service models that perceive research as intruding on vulnerable children at critically sensitive points in their development.

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From the Child and Adolescent Trauma Recovery Program, Mount Sinai School of Medicine, New York, NY (Drs Taylor and Chemtob); and the Jewish Board of Family and Children's Services, Inc, New York, NY (Dr Chemtob).

TRAUMATIC EXPERIENCES that impact children include physical and sexual abuse, war and terrorism, natural and man-made disasters, witnessing domestic violence, catastrophic illnesses, and motor vehicle crashes. Experiencing traumatic events can have significant behavioral and psychological consequences. These include increased propensity to anger, aggression, suicidal ideation, substance dependence, health care use, learning problems, and engaging in criminal acts.[1] The psychological consequences of childhood victimization can also include developmental delays, increased anxiety and depressive symptoms, and sexually inappropriate and regressive behaviors.[2]

Posttraumatic stress disorder (PTSD) symptoms arise in direct response to traumatic events. For the event to qualify as traumatic, it must involve actual or threatened death, serious injury, or a threat to the physical integrity of self or significant others. Intense fear, helplessness, or horror must also characterize the response to the event. In children, the emotional response to the event is often manifested as disorganized or agitated behavior. Posttraumatic stress disorder symptoms cluster in 3 categories: (1) reexperiencing of the traumatic event, (2) avoidance of reminders of the trauma and/or numbing of emotional responsiveness, and (3) symptoms of autonomic hyperarousal. A sense of a foreshortened future may also occur, as well as psychosomatic complaints. The PTSD diagnostic criteria require that symptoms cause clinically significant distress or impairment in functioning and persist for more than 1 month. Symptoms may be delayed for months, or even years.[3] The purpose of this article is to review extant studies of the efficacy of current treatment.

SEARCH STRATEGIES FOR IDENTIFICATION OF STUDIES

This review is modeled on the review of the efficacy of treatment for adult PTSD by Solomon et al.[4] To identify controlled

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treatment studies of child and adolescent PTSD, we conducted an electronic literature search using Psych-Info, MEDLINE, PILOTS, and Psychlit (1970-2003). The search included the following terms and combinations of terms: "traumatic stress," "treatment," "psychotherapy," "flooding," "exposure," "PTSD," "behavior therapy," "pharmacotherapy," "drugs," "cognitive therapy," "randomized clinical trial," "sexual abuse," "physical abuse," "natural disaster," "death," "illness," "bereavement," "community violence," and "witness to violence." In addition, we conducted a manual search of key journals (*Child Abuse and Neglect, Child Maltreatment, Journal of Abnormal Child Psychology, Psychotherapy and Psychosomatics, Journal of Nervous and Mental Disease, Journal of Anxiety Disorders, Journal of Traumatic Stress, Journal of Consulting and Clinical Psychology, Journal of the American Academy of Child and Adolescent Psychiatry, American Journal of Psychiatry, Archives of General Psychiatry, JAMA,* and *Archives of Pediatric & Adolescent Medicine*) and of the abstracts from the International Society of Traumatic Stress Studies annual meetings (1990-2000). Finally, known child PTSD investigators were contacted to obtain information on treatment studies under investigation.

METHODS

In the Solomon et al[4] review of adult PTSD treatment, studies were included if they met the following criteria: (1) exposure to a traumatic event and systematic assessment of PTSD and (2) randomized assignment to treatment groups. Our review of the child and adolescent PTSD treatment literature yielded only 5 published studies that met these criteria. Consequently, we expanded our inclusion criteria beyond studies that focused on the treatment of PTSD to include studies of the treatment of trauma symptoms. Thus, the specific criteria for including a study in the present review were (1) use of randomization to an alternative treatment comparison group or a no treatment (wait-list) group, (2) publication in a peer-reviewed journal, (3) exposure to a traumatic event by a child or adolescent (as distinct from PTSD diagnosis), and (4) use of trauma symptoms as at least 1 outcome measure. Abstracts of all potential studies identified through the search strategy were reviewed. Any study for which the abstract indicated that it possibly met the inclusion criteria was reviewed. If the trial met the inclusion criteria, the study was critically evaluated. Information was entered into a spreadsheet that included demographics, treatment type and length, follow-up, time since trauma, and past or concurrent treatment and findings.

DESCRIPTION OF THE STUDIES

As of this review, 102 English-language published reports were identified that described the treatment of children and adolescents exposed to traumatic events. Almost all of these reports (94 of 102) were case histories, used single-subject designs, or did not provide for a comparison group. Eight randomized controlled studies were identified. In contrast, Solomon et al[4] found 255 treatment reports of which 11 met their stringent criteria for inclusion in their review of adult PTSD treatment. Five of the studies we included incorporated a structured assessment of PTSD by clinically trained assessors as part of their outcome measures. The other 3 studies assessed the effect of treatment on PTSD symptoms, primarily using self-report measures. Five focused on the treatment of sexually abused children,[5-9] while 2 focused on children with disaster-related PTSD symptoms,[10,11] and 1 focused on children who had personally witnessed or were personally exposed to inner-city violence.[12] Details of the studies, including subject description, treatment type/length, and findings, are listed in **Table 1**.

METHODOLOGIC QUALITY

All of the studies were critically reviewed for adherence to rigorous standards of methodology using the gold standards for treatment outcome research proposed by Foa and Meadows.[13] These include (1) clearly defined target symptoms, (2) reliable and valid measures, (3) use of blinded evaluators, (4) assessor training, (5) unbiased assignment to treatment, (6) manualized treatment, and (7) treatment adherence. **Table 2** summarizes the level of adherence to these standards for each study.

COMMENT

EFFICACY OF PHARMACOTHERAPY

There are no randomized controlled studies on the treatment of PTSD in children and adolescents. Despite the lack of studies to guide practitioners, based on a recent survey Cohen et al[14] reported that 95% of child psychiatrists have used pharmacotherapy to treat childhood and adolescent PTSD. The medications most frequently used were selective serotonin reuptake inhibitors and α-adrenergic agonists. The selective serotonin reuptake inhibitors were rated by the respondents as being most effective for treating overall PTSD symptoms including reexperiencing symptoms and avoidance numbing symptoms. α-Agonists were rated as most effective for hyperarousal symptoms.

Seedat et al[15] conducted an open trial of citalopram therapy in children, adolescents, and adults with PTSD. The authors reported significant reductions in mean scores on the Clinician-Administered PTSD Scale and the Clinical Global Improvement Scale. There were no difference in response between the child-adolescent and adult participants. These results are encouraging as selective serotonin reuptake inhibitors have established efficacy in the treatment of adult PTSD. However, the results need to be replicated in a placebo-controlled, randomized, blinded study.

EFFICACY OF PSYCHOTHERAPY

Treatment of PTSD and Trauma Symptoms

Five of the 8 studies (Deblinger et al,[5,6] King et al,[7] Trowell et al,[8] and Chemtob et al[10]) focused directly on the treatment of clinically diagnosed PTSD. The remaining 3 studies measured trauma symptoms as targets for treatment. The studies of Deblinger et al[5,6] and King et al[7] used an individual cognitive behavorial therapy (CBT) protocol. Trowell et al[8] compared an individual psychodynamic treatment with a group treatment that included a psychoeducational component. Chemtob et al[10] compared eye movement desensitization and reprocessing (EMDR), an individual treatment, with a wait-list control. All 5 research groups reported substantial reductions in PTSD symptoms as a function of treatment.

The 3 studies that targeted trauma symptoms, rather than a clinical diagnosis of PTSD, also reported a reduction in symptoms. Stein et al[12] compared a CBT group

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Table 1. Studies of Traumatic Stress With Posttraumatic Stress Disorder (PTSD) and/or Trauma Symptoms Outcome Measures

Source (Topic)	Subjects Description	Treatment Type and Length	Findings
Stein et al[12] (trauma symptoms)	126 Exposed to violence 61 Received group CBT 65 Received no treatment (wait-listed) Population: 55 boys, 71 girls Mean age, 11.0 y	10 Group CBT sessions equivalent in time to 1 class period	At the 3-mo assessment, the treated group showed significantly lower scores on self-report measures of symptoms of PTSD, depression, and parent report of psychosocial dysfunction. However, the teacher report did not show a significant difference between the treated and wait-list groups
Chemtob et al[10] (PTSD diagnosis)	32 Experienced a natural disaster 17 Received EMDR 15 Were wait-listed Population: 10 boys, 22 girls Mean age, 8.4 y	EMDR treatment consisted of 1 diagnostic session and 3 weekly treatment sessions	EMDR resulted in large reduction in level of trauma symptoms, and significant reductions in anxiety and depressive symptoms. Treatment effects were maintained at 6-mo follow-up. Children who no longer met criteria for PTSD following treatment showed significantly reduced use of school health nurse visits
Trowell et al[8] (PTSD diagnosis)	71 Were sexually abused 35 Received individual psychoanalysis 36 Received group psychotherapeutic and psychoeducational therapy Population: 71 girls Mean age, 10.4 y	Individual therapy 1 50-min session each week for 30 wk; group therapy was 18 sessions	Both groups showed substantial reduction in psychopathological symptoms and improvement in functioning with no evident difference between treatments. Individual therapy (which composed nearly twice as many sessions) led to greater improvement in PTSD
Chemtob et al[11] (trauma symptoms)	249 Experienced a natural disaster 176 Received group CBT 73 Received individual CBT Population: 97 boys, 152 girls Mean age, 8.2 y	A weekly individual session or group CBT sessions with successive waves of 4-8 children serving as wait-list control subjects	Posttreatment trauma symptoms significantly reduced with no difference in the results between group and individual treatment. Group treatment was significantly better at retention into treatment
Deblinger et al[5] (PTSD diagnosis)	44 Were sexually abused 22 Received child CBT 22 Received child supportive therapy 22 Received parent CBT 22 Received parent supportive therapy Population: 17 boys, 27 girls Mean age, 5.4 y	11 1.75-h sessions; CBT group met for an additional 15 min each week for a joint parent-child activity session	Children in both groups exhibited significant reductions in PTSD symptoms. Children in the CBT group exhibited better knowledge and retention of body safety skills. Parents in both groups showed significant improvement. Parents in the CBT group reported fewer intrusive thoughts and negative emotional reactions. At 3-mo follow-up, posttreatment gains were comparable, except that the supportive group showed additional improvement in parental emotional reactions
King et al[7] (PTSD diagnosis)	36 Were sexually abused 12 Received child-only CBT 12 Received child CBT and parental training 12 Were wait-listed Population: 11 boys, 25 girls Mean age, 11.4 y	20 Weekly 50-min sessions of individual sessions or individual sessions with the child and parental training	Both treatment groups showed a decrease in PTSD symptoms, fear, coping, anxiety, and depression compared with the wait-list controls. There were no differences between child-only and child-parent intervention conditions
Deblinger et al[5,6] (PTSD diagnosis)	100 Were sexually abused 25 Received child CBT 25 Received parent CBT 25 Received parent-child CBT 25 Received community care Population: 17 boys, 83 girls Mean age, 9.84 y	12 Weekly sessions: child- or parent-only, 45 min; child-parent, 90 min	Child and parent-child condition showed significant decreases in overall PTSD symptoms compared with community care. Parent and parent-child conditions showed significant decreases in children's externalizing behavior and depression and greater improvement in parenting skills. Pretreatment to posttreatment improvements were maintained at all 4 follow-up periods
Celano et al[9] (trauma symptoms)	47 Were sexually abused 25 Received CBT 22 Received supportive therapy Population: 47 girls and mothers Mean age, 10.5 y	1-h sessions for 8 wk, half session with the mother and half session with the child	Both treatment conditions showed decreased PTSD symptoms and internalizing and externalizing behavior. No change noted in betrayal and sex-related beliefs. Cognitive behavioral therapy showed decrease in caretaker self-blame and expectations of undue negative impact on the child.

Abbreviations: CBT, cognitive behavioral therapy; EMDR, eye movement desensitization and reprocessing.

with a wait-list control group, Chemtob et al[11] compared a CBT group with individual CBT, and Celano et al[9] compared CBT with supportive therapy.

Types of Treatments

Variants of CBT were used in 6 of the studies.[5-7,9,11,12] Cognitive behavioral therapy combines information about expected reactions (psychoeducation) to stress and trauma, relaxation training, coaching on coping strategies, and direct exposure to traumatic memories. Four of these studies indicated that CBT is more efficacious than the control conditions. In the studies by Celano et al[9] and Deblinger et al,[6] there were no differences in the efficacy of CBT and supportive treatment in reducing PTSD or trauma symptoms. While 12 studies compared CBT with a wait-list control, the other 5 studies compared CBT with active treatment conditions.[5-7,9,11] These latter studies are more informative because they include a control for nonspecific treatment effects (such as nonspecific effects of

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Table 2. Gold Standards for Treatment Outcome*

Source	PTSD or Trauma Symptoms	Clearly Defined Target Symptoms	Reliable Valid Measures	Blind Evaluators	Assessor Training	Manualized Replicable Specific Treatment	Random Assignment	Treatment Adherence
Stein et al[12]	PTSD	Yes	Yes	No	No	Yes	Yes	Yes
Chemtob et al[10]	PTSD	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Trowell et al[8]	PTSD	Yes	Yes	No	Yes	Yes	Yes	Supervision only
Chemtob et al[11]	Trauma symptoms	Yes	Yes	Yes	Yes	Yes	Yes	Supervision only
Deblinger et al[5]	PTSD	Yes	Yes	Not reported	Not reported	Yes	Yes	Yes
King et al[7]	PTSD	Yes	Yes	Yes	Not reported	Yes	Yes	Yes
Deblinger et al[5,6]	PTSD	Yes	Yes	No	Yes	Yes	Yes	Yes
Celano et al[9]	Trauma symptoms	Yes	Yes	Yes	Yes	Yes	Yes	Supervision only

Abbreviation: PTSD, posttraumatic stress disorder.
*Adapted from Foa and Meadows.[13]

attention). Three of these studies compared CBT under different conditions. The studies by Deblinger et al[5] and King et al[7] compared combinations of child-parent CBT. Chemtob et al[10] compared group and individual forms of a treatment that combined elements of play therapy and CBT. The studies by Deblinger et al[6] and Celano et al[9] compared individual CBT with individual supportive counseling. They reported that PTSD symptoms were reduced significantly by both CBT and supportive counseling conditions. At this point, it is, therefore, impossible to say whether CBT is more effective than other kinds of treatment.

Two non-CBT studies also showed efficacy. Chemtob et al[10] used EMDR as a treatment for PTSD symptoms. Eye movement desensitization and reprocessing is described as a client-paced exposure treatment that incorporates elements of psychodynamic treatments.[10] The results showed a large reduction in PTSD symptoms and large-effect sizes. While Chemtob et al noted that PTSD symptoms had not remitted despite prior treatment, confidence in the findings would have been greater if another clinical treatment (in addition to a wait-list control group) had been used. What is known is that EMDR treatment led to reduced symptoms but, as with the studies that used CBT, it cannot be excluded that this was due to nonspecific effects of treatment.

The other non-CBT study compared individual brief psychoanalytic therapy with group therapy that included a psychoeducational component. Trowell et al[8] reported that both treatment groups showed substantial improvement in many areas. However, the individual brief psychoanalytic condition led to a greater improvement in PTSD symptoms. However, as the individual therapy condition consisted of 30 weeks while the group treatment received 18 sessions, this result may reflect a difference in dose rather than a difference in treatment type.

Treatment Length

The number of treatment sessions required for successful treatment is an important component of the evaluation of efficacy. The number of treatment sessions used in the 8 studies in this review ranged from 3 sessions to 30 sessions (Table 1). The 2 studies reporting 3 to 4 sessions involved treating PTSD symptoms resulting from a natural disaster. The 6 studies reporting a greater number of sessions generally involved treating sexual abuse or personal exposure to violence. Determining the optimal number of sessions for effective treatment, and whether different types of traumas require different numbers of sessions, is an important topic that remains to be investigated.

Group vs Individual Treatment

The results of this review tentatively suggest that both individual and group treatments are efficacious with children and adolescents who have experienced trauma. Five of the studies used individual treatment,[5-7,9,10] and 3 used group treatment.[12] However, only Trowell et al[8] and Chemtob et al[11] directly compared individual and group treatment. Chemtob et al[11] found no differences in efficacy whether the child was treated individually or in a group. However, the children receiving group treatment were significantly more likely to complete treatment. Trowell et al[8] found that both individual and group therapy led to substantial reductions in symptoms and improvement in functioning. In contrast to the findings of Chemtob et al,[11] in the Trowell et al[8] study individual therapy resulted in greater improvement in PTSD symptoms. However, the individual therapy participants in the study by Trowell et al received twice as many therapy sessions as those assigned to group treatment.

Different Outcome Measures

To compare the efficacy of different treatments, the assessment of symptoms needs to be addressed. The 8 studies reviewed in this article each used different assessment instruments to measure PTSD symptoms, both as inclusion and outcome criteria. Reliable, valid, and developmentally appropriate measures need to be used, such as those used for child and adolescent depression and anxiety treatment research. Further studies also need to include multiple measurements by multiple informants in multiple settings on multiple occasions.[16]

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What This Study Adds

There is an increasing awareness that children and adolescents exposed to a wide variety of traumatic events may develop PTSD. However, the treatment of PTSD in children and adolescents lags far behind our ability to diagnose it. This article reviews the current status of treatment research on traumatized children and identifies the characteristics, strengths, and weaknesses of this research. The extant studies suggest that structured treatment focused on PTSD and trauma symptoms can reduce the debilitating effects of this exposure. The need to develop systematic treatment research to aid traumatized children is highlighted. There is a significant opportunity for pediatricians to assume a direct role in psychosocial treatment of child trauma and PTSD.

Sex and Ethnicity

Six of the 8 studies included both boys and girls as participants. None of the studies reported results by sex. Five of the 8 studies reported that nonwhite participants ranged from 28.0% to 83.9%. None of the studies provided an analysis of treatment results by ethnicity or reported on the ethnicity of the therapists.

Clinical Significance

A common way of reporting clinical significance pertains to the number of cases that no longer meet diagnostic caseness criteria as a result of treatment. Because the magnitude of therapeutic change is critical to evaluating the effectiveness of treatment, the importance of reporting clinical significance in addition to statistical significance cannot be overstated.[17-19] Both Deblinger et al[5] and King et al[7] treated clinically diagnosed PTSD using CBT treatments. Deblinger et al[5] reported that 84% of the children who met PTSD criteria at pretreatment in the child treatment conditions no longer met criteria compared with 70% in the parent-only and community control conditions. King et al[7] reported that following treatment 8% of the treated group met PTSD diagnostic criteria compared with 80% of the wait-list controls and at a 12-week follow-up only 33% met diagnostic criteria while the wait-list group remained unchanged at 80%. Chemtob et al[10] treated children diagnosed as having disaster-related PTSD. Despite receiving only 3 sessions of treatment, 56.3% of children no longer met criteria for PTSD at follow-up. Thus, all 4 studies reported positive results, but were limited by lacking controls for nonspecific effects of therapy. Nevertheless, these clinical results are cause for cautious optimism.

CONCLUSIONS

IMPLICATIONS FOR PRACTICE

This review suggests cautious optimism. The studies reviewed converge to suggest that structured treatment focusing on PTSD and trauma symptoms can ameliorate the effects of child and adolescent trauma. Remarkably, given the high prevalence of child trauma, the treatment efficacy literature can be described as being in its infancy. The few extant studies generally did not meet the standards for methodological rigors outlined by Foa and Meadows.[13] Importantly, there was not a single randomized controlled study of psychopharmacological interventions with traumatized children.

From a clinical perspective, we did not find convincing evidence to support the efficacy of any one therapeutic approach for the treatment of child and adolescent traumatic stress and PTSD. Indeed, it is remarkable that there are only 5 randomized studies of clinically diagnosed PTSD, given that almost $1 billion is spent annually on outpatient services for maltreated children alone.[20] What seems promising is that when treatment attention is directed to child trauma, there is improvement. This suggests that there may be value in increasing the skills of frontline, child-serving professionals, and in particular pediatricians, to directly conduct brief psychosocial supportive treatment for children exposed to trauma.

IMPLICATIONS FOR RESEARCH

Controlled treatment research with traumatized children and adolescents is lagging behind other treatment research on child psychopathology. A major reason for this is the sensitive interpersonal context in which research involving victimized children occurs. Traumatized people often have difficulty trusting researchers, and frequently experience research as an unwelcome intrusion on a painful experience. It is not infrequent for potential participants to be involved in legal procedures because of civil or criminal actions related to their trauma. Such involvement complicates treatment owing to the multiple, and sometimes conflicting, agendas that develop. Researchers are sometimes perceived as further victimizing participants for the purpose of their research. Similarly, it is difficult to justify ethically withholding of treatment from victims. Fortunately, research that is directed to helping victims by providing treatment is more acceptable when alternative treatments are offered. Given that there is no dominant validated psychological PTSD treatment, this permits the use of designs that randomize patients to alternative treatments that have good face validity.

Recent treatment research with adult PTSD[21] suggests that prevention of PTSD can be successful when patients are selected on the basis of meeting criteria for acute stress disorder, a significant risk factor for PTSD. Similar research with children is needed to help clarify the value of early structured intervention for all children following exposure to high-risk events such as sexual or physical abuse. Finally, in view of the recent increase in the national vulnerability to terrorism of the United States, significant attention and funding should be invested in developing and evaluating preparedness interventions for children and families to increase the resilience of children and child-serving systems faced with large-scale emergencies.

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Correspondence: Claude M. Chemtob, PhD, One Gustave Levy Place, Box 1230, Mount Sinai School of Medicine, New York, NY 10028 (claude.chemtob@mssm.edu).

REFERENCES

1. Giaconia RM, Reinherz HZ, Silverman AB, Pakiz B. Traumas and posttraumatic stress disorder in a community population of older adolescents. *J Am Acad Child Adolesc Psychiatry.* 1995;34:1369-1380.
2. Kendall-Tackett KA, Williams LM, Finkelhor D. Impact of sexual abuse on children: a review and synthesis of recent empirical studies. *Psychol Bull.* 1993; 113:164-180.
3. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition.* Washington, DC: American Psychiatric Association; 1994.
4. Solomon SD, Gerrity ET, Muff AM. Efficacy of treatments for posttraumatic stress disorder. *JAMA.* 1992;268:633-610.
5. Deblinger E, Lippmann J, Steer R. Sexually abused children suffering posttraumatic stress symptoms: initial treatment outcome findings. *Child Maltreat.* 1996; 1:130-321.
6. Deblinger E, Stauffer L, Steer R. Comparative efficacies of supportive and cognitive behavioral group therapies for young children who have been sexually abused and their nonoffending mothers. *Child Maltreat.* 2001;6:332-342.
7. King N, Tonge B, Mullen M, et al. Treating sexually abused children with posttraumatic stress symptoms: a randomized clinical trial. *J Am Acad Child Adolesc Psychiatry.* 2000;39:1347-155.
8. Trowell J, Kolvin I, Weeramanthri T, et al. Psychotherapy for sexually abused girls: psychopathological outcome findings and patterns of change. *Br J Psychiatry.* 2002;180:234-247.
9. Celano M, Hazzard A, Webb C, McCall C. Treatment of traumagenic beliefs among sexually abused girls and their mothers: an evaluation study. *J Abnorm Child Psychol.* 1996;24:1-17.
10. Chemtob CM, Nakashima J, Hamada RS, Carlson JG. Treatment for elementary school children with disaster-related posttraumatic stress disorder: a field study. *J Clin Psychol.* 2002;58:99-112.
11. Chemtob C, Nakashima JP, Hamada RS, Roitblat HL. Psychosocial intervention for post-disaster trauma symptoms in elementary school children: a controlled community field study. *Arch Pediatr Adolesc Med.* 2002;156:211-216.
12. Stein B, Jaycox L, Kataoka S, et al. A mental health intervention for schoolchildren exposed to violence. *JAMA.* 2003;290:603-611.
13. Foa EB, Meadows EA. Psychosocial treatment for posttraumatic stress disorder: a critical review. *Annu Rev Psychol.* 1997;48:449-480.
14. Cohen J, Mannarino A, Rogal S. Treatment practices for childhood posttraumatic stress disorder. *Child Abuse Neglect.* 2001;25:123-135.
15. Seedat S, Stein D, Ziervogel C, et al. Comparison of response to a selective serotonin reuptake inhibitor in children, adolescents, and adults with posttraumatic stress disorder. *J Child Adolesc Psychopharmacol.* 2002;12:37-46.
16. O'Donohue WT, Elliott AN. Treatment of the sexually abused child: a review. *J Clin Child Psychol.* 1992;21:218-228.
17. Kazdin AE, Weisz JR. Identifying and developing empirically supported child and adolescent therapy outcome research. *J Consult Clin Psychol.* 1998;66:19-26.
18. Fonagy P. Evaluating the effectiveness of interventions in child psychiatry. *Can J Psychiatry.* 1997;42:584-594.
19. Briere J. Treatment outcome research with abused children: methodological considerations in three studies. *Child Maltreat.* 1996;1:348-352.
20. Peterson L, Brown D. Integrating child injury and abuse-neglect research: common histories, etiologies, and solutions. *Psychol Bull.* 1994;116:293-135.
21. Bryant RA, Harvey AG, Dang ST, Basten CA. A comparison of cognitive behavioral therapy and supportive counseling. *J Consult Clin Psychol.* 1998;66:862-866.

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