A Pilot Study of Modified Cognitive-Behavioral Therapy for Childhood Traumatic Grief (CBT-CTG)

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ABSTRACT

Objective: This pilot study evaluated outcomes for a modified 12-session protocol of cognitive-behavioral therapy for childhood traumatic grief (CBT-CTG) conducted between March 2004 and October 2005. CTG is an emerging condition characterized by a combination of posttraumatic stress and unresolved grief symptoms. This two-module treatment model consisting of sequential trauma- and grief-focused components was shortened from a previously presented 16-session protocol. **Method:** Thirty-nine children ages 6 to 17 years old with CTG and their parents received the modified 12-session protocol of CBT-CTG. CTG and posttraumatic stress disorder (PTSD) symptoms were assessed at pretreatment, after the trauma-focused module, and after the grief-focused module (at posttreatment). Child depression, anxiety, and behavioral symptoms, as well as parental depression and PTSD symptoms, were assessed at pre- and posttreatment. **Results:** Children reported significant improvement in CTG, PTSD, depression, and anxiety and parents reported significant improvement in children's PTSD, internalizing and total behavior problems, and their personal PTSD symptoms. Although PTSD significantly improved only during the trauma-focused module of treatment, CTG improved significantly during both trauma- and grief-focused modules of treatment. Child satisfaction and parent satisfaction for this treatment protocol were also high. **Conclusions:** These findings suggest that the shortened CBT-CTG protocol, which is similar in the number of sessions to what many community child bereavement programs offer, may be acceptable and efficacious for this population. The CBT-CTG model requires further evaluation in randomized, controlled treatment trials. *J. Am. Acad. Child Adolesc. Psychiatry*, 2006;45(12):1465–1473. **Key Words:** pilot study, cognitive-behavioral therapy, childhood traumatic grief, posttraumatic stress disorder.

Similar to adult complicated grief (Prigerson and Jacobs, 2001), childhood traumatic grief (CTG) is an emerging construct that is not yet included in the *DSM-IV* and that appears from the available empirical data to consist of a combination of unresolved grief and posttraumatic stress symptoms that occur with significant impairment in important areas of functioning (Brown and Goodman, 2005; Cohen and Mannarino, 2004; Cohen et al., 2002; Layne et al., 2001a). Examples of unresolved grief symptoms are yearning or searching for the deceased and a lack of acceptance of the death (Brown and Goodman, 2005; Prigerson and Jacobs, 2001). Posttraumatic stress symptoms typical in CTG are similar to those seen in posttraumatic stress disorder (PTSD): reexperiencing aspects of the traumatic cause of death, including preoccupying thoughts about the trauma or the person who died (Melham et al., 2004); avoidance of traumatic reminders and emotional numbing; and physiological hyperarousal, irritability, or anger (Brown and Goodman, 2005; Melham et al., 2004). Children with CTG may also experience depressive symptoms such as sadness, hopelessness, and survivor's guilt (Brown and Goodman, 2005; Cohen and Mannarino, 2004). CTG may meet criteria for PTSD, but children must also have additional unresolved grief symptoms beyond the

Accepted June 27, 2006.

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This article was developed under grant number SM 54319 from the Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services (HHS). The views, policies, and opinions expressed are those of the authors and do not necessarily reflect those of SAMHSA or HHS.

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DOI: 10.1097/01.chi.0000237705.43260.2c

strict diagnostic criteria for PTSD. Layne et al. (2001a) describe CTG as an impingement of PTSD symptoms on the child's ability to resolve typical grief issues.

For the purposes of this study, the traumatic nature of the death was determined subjectively by the child in that the death was shocking or unexpected, and/or accompanied by a sense of horror, terror, or overwhelming fear. Although the traumatic nature of the death was determined subjectively, the presence of CTG was measured in a standardized manner as described below.

Children with CTG may become "stuck" on the traumatic nature of their loved one's death, such that they cannot have even happy memories of the person who died without starting to think about the way the person died. Because typical tasks of bereavement require children to reminisce about their loved ones in an ongoing way (Wolfelt, 1996; Worden, 1996), CTG may impinge on children's ability to negotiate the typical course of bereavement. Although trauma-focused interventions alone may successfully resolve PTSD symptoms in children, they may not be adequate to target the unresolved grief symptoms that are characteristic of CTG. The addition of specific grief-focused components may be beneficial in this regard.

Trauma-focused cognitive-behavioral therapy (TF-CBT) is a treatment model that is well established for treating PTSD, depression, and anxiety symptoms in sexually abused and multiply traumatized children (Cohen and Mannarino, 1996, 1998; Cohen et al., 2004; Deblinger et al., 1996; King et al., 2000). TF-CBT was modified for use in treating CTG by adding grief-focused components to the trauma-focused components of TF-CBT. This CTG protocol, CBT-CTG, was used to treat children and parents following an airline disaster in Pittsburgh in 1994 (Stubenbort et al., 2001), although empirical data were not collected for that cohort. Following the terrorist attacks of September 11, 2001, and the funding of the National Child Traumatic Stress Network (*http://NCTSNet.org*) by the Substance Abuse and Mental Health Services Administration (SAMHSA) in 2001, the CBT-CTG protocol was further adapted for community use through solicitation of comments by more than 100 community-based therapists. The original CBT-CTG model is outlined in Figure 1.

The 16-session CBT-CTG model was used in an open trial study of 22 children (11 female, 11 male, 68% white, 32% African American) ages 6 to 17 years old with CTG as defined above to evaluate the targeted impact of the trauma and grief treatment modules used in the model. These children had lost parents or siblings to accidents, medical causes, homicide, suicide, and drug overdose. Cohen et al. (2004) demonstrated that significant improvement in PTSD symptoms and adaptive functioning occurred only during the trauma-focused treatment module (first eight sessions) of this protocol, whereas CTG significantly improved during both the trauma-focused module and grief-focused module (second eight sessions) of the protocol. Depression, anxiety, and behavior problems, as well as parental depression and PTSD symptoms, improved significantly from pre- to posttreatment. This study thus lent support not only for the overall effectiveness of the CBT-CTG model but also for the trauma- and grief-focused phased-treatment approach. This study was the first to evaluate the potential benefits of providing individual therapy to children with CTG and providing a parental treatment component for these children because all of the previous studies had provided group therapy without inclusion of parents.

It is important to consider what types of treatments or other services these children are likely to receive in community settings to maximize the goodness of fit between program implementation requirements and institutional resources, expectations, and values. There is a fair amount of variability in this regard, and it is thus difficult to characterize typical grief support services. This is confirmed by one of the most widely used community child grief support approaches, the Dougy Center model, which offers child grief support anywhere from a single meeting to more than 1 year, depending on the needs of the child (*www.dougy.org*). In the largest community grief support program in the city where the current study was conducted, typical grief support services have the following characteristics (A. Lurier, Ph.D., oral communication, February 2005): it is provided by volunteers or paraprofessional staff; it is provided in either group, family, or individual formats; it is provided over a relatively small number of sessions (10–12 sessions per child), lasting 60 to 90 minutes each; it consists of a combination of the following activities: rapport- and trust-building, grief education, expressive arts, bibliotherapy, and/or positive memorializing of the deceased; and it does not

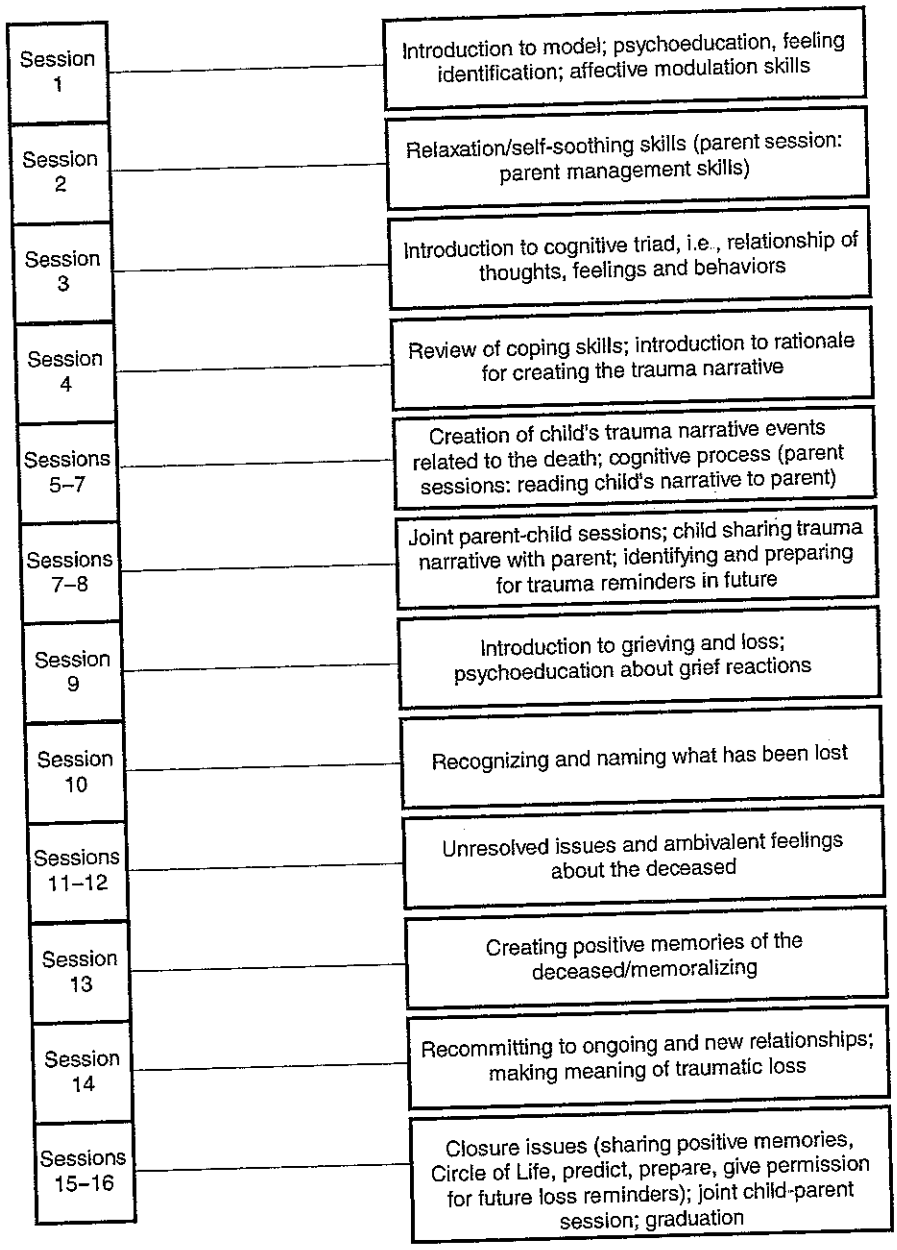

Fig. 1 The 16-session cognitive-behavioral therapy for the childhood traumatic grief protocol.

typically include direct exposure activities related to the traumatic nature of the death.

It is also important to understand the philosophical stance of many community bereavement programs, which frequently do not consider themselves to be providing "treatment." Furthermore, these programs typically view almost all reactions to grief, including childhood traumatic grief, as normative processes that follow the death of a loved one (*www.dougy.org*) rather than as conditions that warrants psychotherapeutic interventions (Zambelli and DeRosa, 1992). Child grief support groups are believed by these programs to facilitate a normative process. Thus, a child with CTG, even one with significant PTSD symptoms, who is seen in a community bereavement program, may likely not be distinguished from other bereaved children but instead be viewed as experiencing a normative reaction to the loss of a loved one and be provided with 12 or fewer sessions of typical grief support services.

In light of the way services are typically provided to bereaved children in our community, we designed the present study to investigate whether children and adolescents with CTG could respond to a shortened version of the CBT-CTG model (Cohen et al., 2006), which was closer in number of sessions to what bereavement programs provide in our community. Specifically, we shortened CBT-CTG from 16 sessions to 12 sessions by compressing the previous eight-session grief-focused module into four sessions. We hoped to explore three possibilities in this study. First, we hoped to explore whether this modified 12-session CBT-CTG model would be effective in significantly reducing distress associated with CTG and in decreasing psychiatric symptoms. Second, we aimed to explore whether, as in the original 16-session study, significant improvement in PTSD symptoms would occur only during the trauma-focused module, whereas significant improvement in CTG reactions would occur during both the trauma- and grief-focused modules. Third, we hoped to explore whether the effect size of CTG improvement within the grief-focused module would be less than the effect size of improvement of CTG during the trauma-focused module because the grief-focused module was only half as long as the trauma-focused module.

METHOD

Inclusion Criteria

Inclusion criteria were significant CTG symptoms as defined by a score of >30 on the CTG scale of the University of California, Los Angeles/Brigham Young University (UCLA/BYU) Extended Grief Inventory (EGI; Layne et al., 2001b), ages 6 to 17 years, consent/assent, and availability of a participating caretaking adult. Exclusionary criteria were serious cognitive or developmental delays (defined by a mental retardation educational placement or a diagnosis of pervasive developmental disorder) or inability to communicate in English. No children were excluded from the study for these reasons.

Participants

Participants were 39 children, 6 to 17 years old, consecutively referred to an outpatient child psychiatry program specializing in the treatment of childhood trauma and traumatic grief. All children who lost significant others because of traumatic causes as defined above and met inclusion criteria were included in the study. Causes of death were sudden medical condition (n = 12, 30.77%), motor vehicle or other accident (n = 11; 28.2%), homicide (domestic or community violence; n = 8; 20.51%), suicide (n = 3; 7.69%), sudden infant death (n = 2; 5.13%), and drug overdose (n = 3; 7.69%). Children were referred by community bereavement programs, pediatricians, or parents. The bereavement programs referred children whose loved ones had died in objectively traumatic (i.e., sudden, shocking) circumstances. Parents and pediatricians typically referred children because they were concerned that children were not recovering in an expected manner from a loss, whether or not the cause was objectively traumatic. Demographic characteristics of the sample are included in Table 1.

All of the children and participating parents or caretakers signed assent and consent forms, respectively. The protocol was approved by the hospital's institutional review board.

Participant Attrition

Seventy-two participants were screened for inclusion in the study. Twenty participants were excluded because they did not meet criteria (i.e., scores on the EGI were not high enough to be included). No participants refused to participate. Twelve participants dropped out of treatment before completing all 12 treatment sessions, and data for these participants were not included in the present report. Mean number of treatment sessions completed by these participants was seven (range 2–11). These participants did not differ on any demographic variables from treatment completers. One subject was dropped from the data analysis because of <90% adherence to the treatment protocol. This left a total of 39 participants who completed all 12 treatment sessions.

Measures

The following self-report instruments were used to assess child symptoms:

The UCLA/BYU EGI (Layne et al., 2001b) is a 28-item self-report measure for children and adolescents to report frequency with which traumatic grief reactions have been experienced in the past month. We used a scoring and interpretation algorithm for the EGI reported by Brown and Goodman (2005). This study was a confirmatory factor analysis of the original (Layne et al., 2001a) factor analysis of the EGI, which demonstrated strong face validity

TABLE 1
Demographic Characteristics of the 12-Week Protocol Sample

Measure	No.	%
Age, yr (peers)		
6–8	8	20.5
9–12	19	48.7
13–17	12	30.8
Gender		
Male	12	30.8
Female	27	69.2
Ethnicity		
White	28	71.8
African American	8	20.5
Biracial	3	7.7
Identity of deceased		
Parent	23	59.0
Sibling	6	15.4
Aunt/uncle	1	2.6
Grandparent	1	2.6
Close friend	4	10.3
Other	4	10.3
Time since death (mo)	Mean = 10.34 (SD = 17.34; range, 1–86)	

Brown and Goodman (2005) also demonstrated strong construct validity of the EGI in comparing children with versus without CTG with regard to PTSD, depression, interpersonal relationships, and self-esteem ($p < .001$ on all measures). The authors reported three factor-analytically derived subscales consisting of Traumatic Grief (TG), Ongoing Presence (OP), and Positive Memories (PM). The TG subscale includes 23 items that assess the impact of traumatic stress on the child's ability to tolerate memories of the person who died (e.g., "I don't do positive things that I want or need to do because they remind me of the person who died.") The OP subscale includes the following two items indicative of the ongoing presence of the person who died: "I think I see him/her or feel his/her presence" and "I feel that even though the person is gone, he/she is still an important part of my life." The PM subscale includes the following three items: "I have pleasant or comforting dreams about the person who died," "I enjoy thinking about him/her," and "I enjoy good memories of him/her." All items are rated on a 5-point Likert scale ranging from 0 (almost never, less than once per month) to 4 (always, several times per day). Cronbach's α for the scales was .94 for TG, .62 for OP, and .73 for PM (Brown and Goodman, 2005). Because the TG scale is the focus of interest for the present study, it is the only one included in the analyses for this article. Cronbach's α for the TG scale for our sample was .84. Although no clinical cutoff score was established by the EGI developers, the authors established a cutoff score of 30 on the EGI for entrance into the study corresponding to a frequency of every possible CTG symptom occurring monthly to weekly.

The Children's PTSD Symptom Scale (CPSS; Foa et al., 2001) is a 24-item instrument composed of a 17-item self-report measure of PTSD symptoms rated on a 4-point Likert scale (0 = none or only one time; 3 = five or more times per week/almost always) and a seven-item scale of adaptive functioning (with each item rated yes or no with regard to impairment). The CPSS has high test-retest reliability and high convergent validity when compared with a structured interview; the CPSS also has discriminant validity superior to other self-report instruments of child PTSD rating scales (Foa et al., 2001). A score>18 is suggestive of clinically significant PTSD symptoms.

Moods and Feelings Questionnaire (MFQ; Angold et al., 1995) is a 33-item youth self-report instrument to assess child and adolescent depression. This version of the MFQ has high internal reliabilities (Cronbach's $\alpha > .90$) with high convergent and discriminant validity compared with other self-report instruments for childhood depression. Scores >27 on this version of the MFQ are suggestive of clinically meaningful depressive symptoms.

The Screen for Child's Anxiety Related Emotional Disorders (SCARED; Birmaher et al., 1997) is a 38-item self-report measure for children's anxiety comprising five factor analytically derived subscales: somatic/panic symptoms, general anxiety, separation anxiety, social phobia, and school phobia. Internal consistency α values are .74 to .93; test-retest reliability and discriminant validity are also high. A score of 26 is indicative of clinically meaningful anxiety for the total scale.

The following instruments were completed by parents to report on children's symptoms:

UCLA PTSD Index for *DSM-IV* Parent Report Version (UCLA Index) (Steinberg et al., 2004) is a 21-item instrument for the parent to report the child's PTSD symptoms. Parent report has moderate convergent reliability with the child's report on the UCLA Index; the instrument has a Cronbach α of .78 for the total score and interrater reliability between .94 and .97. It is the only parent report measure that measures child PTSD symptoms for this age group. A score >23 is indicative of moderate PTSD.

Child Behavior Checklist (CBCL; Achenbach, 1991) is one of the most widely used parent report measures to assess child emotional and behavioral difficulties. The CBCL has well-established validity and reliability data. For this study, only the broadband factors (internal, external, and total behavior problems) were used as a global index of psychosocial functioning. Normed scores ≥60 are considered to be in the borderline clinical range, with scores >70 in the clearly clinical range. The following instruments were completed by parents with regard to their personal symptoms.

The PTSD Diagnostic Scale (PDS; Foa, 2001) is a 49-item (17 PTSD symptom items) instrument that assesses *DSM-IV* PTSD trauma exposure, diagnostic status, and symptoms in adults. Internal consistency α is .97 for the total scale, with sensitivity of 0.90 and specificity of 0.75 when compared to a structured clinical interview for PTSD. Clinical cutoff scores are 11 to 20 for moderate PTSD symptoms and 21 to 35 for severe PTSD symptoms.

The Beck Depression Inventory-II (BDI-II; Beck et al., 1996) is a widely used self-report measure of adult depression with strong reliability and validity that has been verified in numerous studies. Scores >18 are suggestive of clinically meaningful depressive symptoms.

Client Satisfaction Questionnaire-Parent and Child Versions (CSQ-P and -C) are eight-item questionnaires that assess parent and child satisfaction, respectively, with treatment services provided by our Center. Each item is scored on a 4-point Likert scale (1–4, with 4 being the most positive rating on each question). One example is "How much has treatment helped you?" and choices are "none of my needs have been met," "only a few of my needs have been met," "most of my needs have been met," and "almost all of my needs of have been met." In another example, choices to the question "If you need help again, would you come back to our program?" are "no, definitely not," "no, I don't think so," "yes, I think so," and "yes, definitely."

The EGI and CPSS were given to children before treatment and after the 8th and 12th sessions to track sequential changes in PTSD and CTG as the trauma- and grief-focused components of treatment were completed. The MFQ, SCARED, CBCL, UCLA Index, PDS, and BDI-II were administered at pre- and posttreatment only. All of the instruments were administered by an independent evaluator who was not a study therapist. As a preliminary test of reading ability, participating children and adolescents were asked to read one item from each instrument. If they were unable to read the item and explain what it meant, then the evaluator read the assessment instrument to the child.

Procedures

Upon referral to the clinic, intake information was obtained by telephone and the treatment study was explained. Families who agreed were scheduled for an initial assessment to determine eligibility for the study. As noted earlier, to include only children with significant symptoms of CTG, a minimum score of 30 on the CTG scale of the EGI was used. Treatment was provided free of charge for study participants. No recruitment ads were placed and families were not paid to participate. Assessment instruments were administered at pretreatment, after session 8 (EGI and CPSS only), and at posttreatment (after session 12).

Treatment was provided by two therapists, a doctoral-level psychologist and a master's degree–level social worker. Both of the therapists were trained to criteria by one of the CBT-CTG treatment developers. Adherence to the modified CBT-CTG model

was maintained throughout the course of the study through intensive supervision and independent rating of audiotaped treatment sessions to adherence checklists. Adherence was >90% for all sessions of all but one subject. This subject was not included in the data analysis.

Treatment

Modified CBT-CTG. As noted in the introduction, CBT-CTG was modified for this study from a 16-session protocol to a 12-session protocol by decreasing the grief module from 8 to 4 sessions. This was accomplished by combining the contents of some sessions and compressing other activities. All of the key components described in the CBT-CTG model (Cohen and Mannarino, 2004) were retained in this modified version.

Each treatment session consisted of individual child and parent sessions. The content of the parent sessions generally paralleled that of the child sessions, with the additional content of behavioral management (parenting skills) being provided as needed to parents in order to address their children's behavioral issues. Content addressed during each session for modified CBT-CTG is outlined in Figure 2.

Statistical Analyses

Data analyses were conducted using SPSS general linear modeling programs. Repeated-measures analyses of variance were

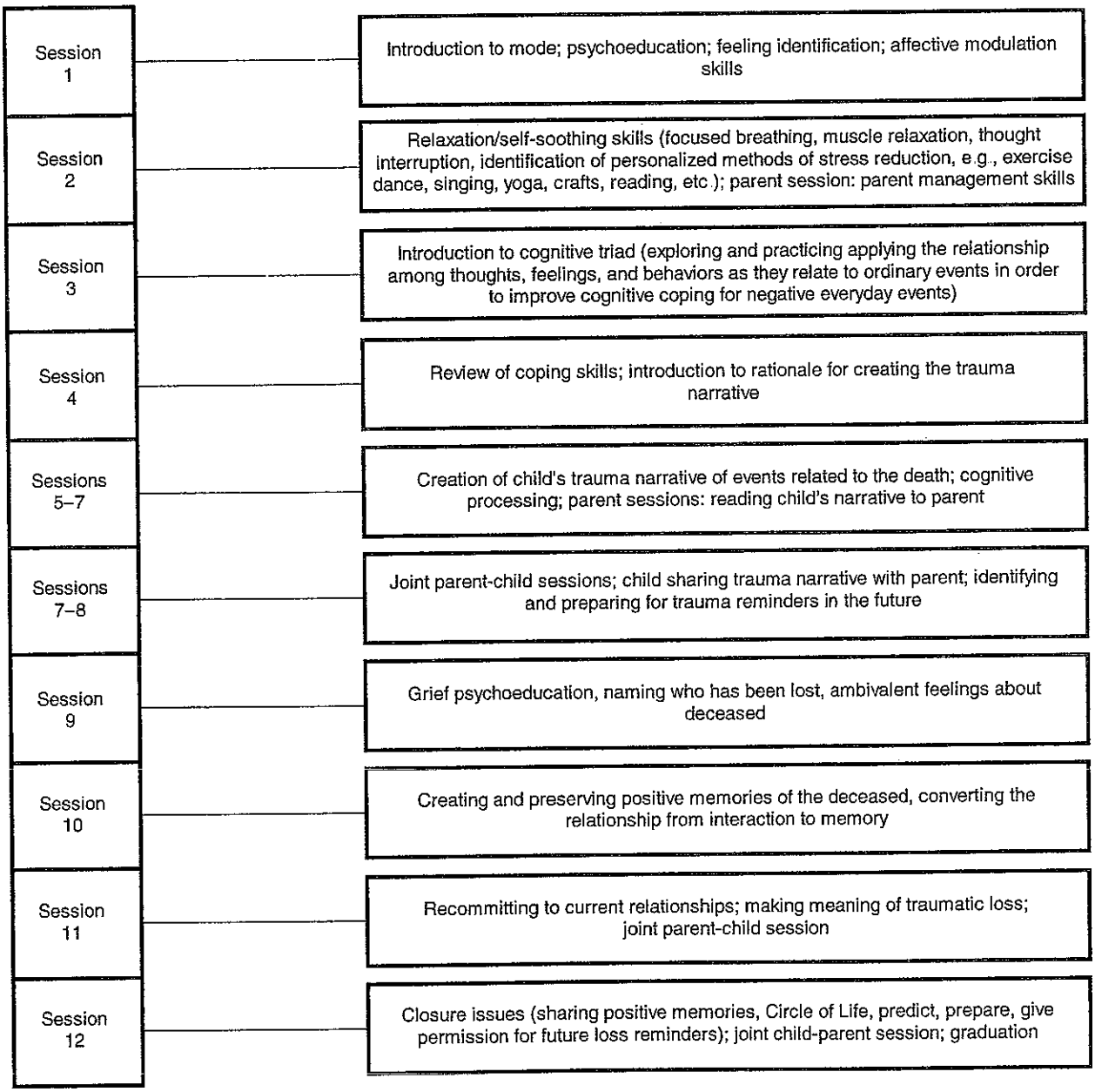

Fig. 2 Modified 12-session cognitive-behavioral therapy for childhood traumatic grief protocol

conducted to evaluate sequential change in each interval of treatment (trauma-focused and grief-focused modules) on the primary outcome measures (EGI and CPSS) for completers of the 12-week treatment protocol. Paired sample t tests were performed on the MFQ, SCARED, CBCL, UCLA Index, PDS, and BDI-II to assess overall improvement during treatment. The Bonferroni correction was used to control for type I errors.

RESULTS

Results of the 12-week treatment study are shown in Tables 2 and 3. As shown in Table 2, children as a group reported statistically significant pre- to posttreatment improvement in CTG, PTSD, depression, and anxiety, and their parents as a group reported significant improvement in children's PTSD, internalizing, externalizing, and total behavior problems, as well as in their personal PTSD symptoms. As noted in Table 2, Cohen's d effect sizes were medium to large for all of these improvements. There was no statistically significant improvement in parents' depressive symptoms pre- to posttreatment; however, pretreatment scores on this measure were not in the clinical range. Mean improvements on the CPSS, SCARED, UCLA Index, CBCL Internalizing and Total Behavior scales, and the PDS were clinically significant, that is, they correspond with improvements in scores from the clinical or borderline clinical range to the normal range on these respective instruments. Although no clinical cutoff has been established by the EGI developers, it is possible that mean improvement in the EGI experienced by the participants, which corresponded to a decrease from a mean response of weekly to monthly to weekly, may be also clinically significant. Of note is that every child in the study experienced what we would consider clinically meaningful improvement in EGI scores (i.e., drop in frequency of clinical symptoms). The CSQ from children and parents also rated this treatment highly. The mean score on the CSQ-C was 28.33 (maximum possible score = 32), whereas the mean score on the CSQ-P was 29.68 (maximum possible = 32).

As shown in Table 3, the timing of improvements in PTSD and CTG symptoms was consistent with what we hypothesized: that significant improvement in PTSD symptoms occurred only during the trauma-focused module of treatment, whereas significant improvement in CTG symptoms occurred during both trauma- and grief-focused modules. Also consistent with what we hypothesized, the effect size of the improvement of CTG during the grief-focused module was less (Cohen's d = 0.39) than that seen during the trauma-focused module (Cohen's d = −0.60; because the length of the trauma-focused module was twice that of the grief-focused module and CTG is believed to be a combination of trauma and unresolved grief symptoms). It should be noted that both of these were indicative of significant treatment effect sizes.

DISCUSSION

The results of this second pilot study of the CBT-CTG model suggest that this sequential trauma- and

TABLE 2
Paired Samples t Test (Pre- versus Posttreatment)

Measure	Pretreatment, Mean (SD)	Posttreatment, Mean (SD)	95% CI of the Difference		t	p	Cohen's d
			Lower	Upper			
EGI (n = 38)	48.29 (12.96)	31.13 (18.29)	11.13	23.18	5.77	.000	−1.08
CPSS	21.62 (9.26)	13.64 (9.18)	4.53	11.42	4.68	.000	−.866
MFQ	20.74 (13.13)	13.28 (12.15)	4.04	10.88	4.42	.000	−.590
SCARED	33.54 (18.05)	24.36 (19.06)	5.36	13.00	4.86	.000	−.495
UCLA Index (n = 35)	28.80 (14.16)	20.20 (11.09)	2.97	14.23	3.10	.004	−.676
CBCL-Internalizing (n = 35)	61.71 (9.30)	55.26 (10.58)	2.81	10.10	3.60	.001	−.648
CBCL-Externalizing (n = 35)	56.11 (11.29)	52.57 (11.68)	.176	6.91	2.14	.040	−.308
CBCL Total (n = 35)	60.03 (9.56)	54.74 (10.79)	1.86	8.71	3.13	.004	−.519
BDI-II (n = 23)	13.65 (9.21)	12.00 (11.55)	−1.90	5.20	0.965	.345	−.158
PDS-SR (n = 24)	15.25 (12.38)	9.58 (11.33)	2.81	8.52	4.11	.000	−.478

Note: CI = confidence interval; EGI-CTG = Expanded Grief Inventory-Child Traumatic Grief; CPSS = Child PTSD Symptom Scale; MFQ = Mood and Feelings Questionnaire; SCARED = Self-Report for Childhood Anxiety Related Disorders; UCLA Index = UCLA PTSD Index for DSM-IV Parent Report Version; CBCL = Child Behavior Checklist; BDI-II = Beck Depression Inventory-II; PDS-SR = PTSD Scale Self-Report.

TABLE 3
Paired Comparisons of EGI-CTG and CPSS for Repeated Measures

Measure	Mean Difference (SE)	98 3% CI of the Difference		t	p	Cohen's d
		Lower	Upper			
EGI-CTG						
Pretreatment: 8 wk (n = 38)	9 87 (3 01)	2 35	17 39	3.28	002	−0 60
8 wk: posttreatment (n = 37)	7 41 (2.11)	2 13	12 68	3.52	001	−0 39
Pretreatment posttreatment (n = 38)	17 16 (2 97)	9 72	24 59	5.77	000	−1 08
CPSS						
Pretreatment: 8 wk (n = 38)	6 05 (1 59)	2 07	10 03	3.80	001	−0 59
8 wk: posttreatment (n = 38)	2 03 (1.45)	−1 61	5 66	1 40	171	−0.20
Pretreatment post treatment (n = 39)	7 97 (1 70)	3 72	12 23	4.68	000	−0.87

Note: Bonferroni-corrected significance level of 05/3. EGI-CTG = Expanded Grief Inventory-Child Traumatic Grief; CPSS = Child PTSD Symptom Scale

grief-focused treatment for children and parents may be a promising approach for resolving children's CTG and PTSD symptoms, as well as depression, anxiety, and behavior problems, even when it is shortened to 12 treatment sessions. The finding that self-reported improvements in CTG and PTSD symptoms are obtained through provision of this model, even when the number of grief-focused sessions in the protocol are decreased by half (from eight to four grief-focused sessions), also offers intriguing hints regarding the process through which CTG symptoms may be resolved. Specifically, these findings suggest that once trauma symptoms have been resolved for these children and adolescents, their grief symptoms may respond to relatively brief interventions.

This study, taken in combination with previous studies (Cohen et al., 2004; Layne et al., 2001a), suggests several possible directions for future research with regard to CTG. One productive line of future CTG treatment may be to evaluate, through random assignment, groups with different numbers of grief sessions and the impact of providing different "doses" of grief-focused interventions following the provision of trauma-focused components. Another may be to compare TF-CBT alone to CBT-CTG to evaluate whether resolving trauma symptoms alone is sufficient to lead to CTG remission. Additional future research should compare CBT-CTG to treatments that children routinely receive in community settings following traumatic deaths. Finally, more research is needed with regard to definitional and measurement issues for CTG.

The findings of the present study, which replicate the original TG-CBT pilot study, together with the adult data regarding complicated grief (Prigerson et al., 1999), confirm our belief that CTG may be a unique condition consisting of a combination of posttraumatic and unresolved grief symptoms, which may require combined interventions. This type of combined trauma- and grief-focused treatment has been found to decrease CTG and depression in previous open trials (Cohen et al., 2004; Layne et al., 2001a). Although depression was not specifically targeted, TF-CBT alone has been effective in decreasing depressive symptoms in other traumatized cohorts (Cohen et al., 2004). However, it is possible that the synergistic impact of including both trauma and grief components contributed to the improvement in depressive symptoms. Improvement in children's behavioral symptoms has also been shown in previous studies of TF-CBT alone, but it is possible that inclusion of bereaved parents in TG-CBT treatment and successfully improving their PTSD symptoms as well as addressing their personal grief issues, which were unfortunately not measured during the present study, may have contributed to parental efficacy and thus to improved child behaviors.

Limitations

The lack of a comparison or control condition to which children were randomly assigned is the greatest limitation of this study. This limitation prevents us from being able to draw any conclusions regarding a causative relationship between the CBT-CTG treatment and children's symptomatic improvements. Other limitations include the use only of self- and parent reports; reading the instruments to some

children, which deviated from standardized procedures; the modest size of the sample; the relatively low representation of minority families other than African American/biracial; the relatively high rate of non-completers in this cohort; and no long-term follow-up.

Clinical Implications

The finding that this shortened form of CBT-CTG may contribute to resolution of participating children's CTG and associated symptoms, as well as parent's PTSD symptoms, provides confirmatory support for the CBT-CTG model as a useful clinical intervention and a promising direction for future randomized, controlled trials. It suggests that an efficacious intervention for CTG may not need to take any longer than typical grief support services as they are currently provided in community settings. Although the current findings must be viewed as preliminary pending confirmation in a randomized, controlled trial, community bereavement programs may consider the value of CTG screening in children whose significant others have died under traumatic circumstances. If these children do not respond to typical grief-remediation services, then consideration should be given to providing CBT-CTG if they have staff who can do so or referring these children to clinicians who can provide such interventions.

In conclusion, the present pilot study adds to the preliminary evidence that a sequential individual trauma- and grief-focused treatment approach for children with CTG may efficaciously address CTG and PTSD symptoms. This study is the second to suggest that including parents in conjoint treatment for children with CTG additionally benefits participating parents by helping to resolve parents' personal symptoms related to the death. More research is needed to evaluate the CBT-CTG model, particularly in head-to-head randomized, controlled studies comparing this model to other services typically provided to bereaved children.

Disclosure: The authors have no financial relationships to disclose.

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