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Group crisis intervention for children during ongoing war conflict

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■ **Abstract** The aim of this study was to evaluate the short-term impact of a group crisis intervention for children aged 9–15 years from five refugee camps in the Gaza Strip during ongoing war conflict. Children were selected if they reported moderate to severe posttraumatic stress reactions, and were allocated to group intervention (N = 47) encouraging expression of experiences and emotions through storytelling, drawing, free play and role-play; education about symptoms (N = 22); or no intervention (N = 42). Children completed the CPTSD-RI and the CDI pre- and post-intervention. No significant impact of the group intervention was established on children's posttraumatic or depressive symptoms. Possible explanations of the findings are discussed, including the continuing exposure to trauma and the non-active nature of the intervention.

■ **Key words** child – trauma – war – PTSD – treatment

Introduction

The association between war trauma, posttraumatic stress disorders (PTSD) and other types of psychopathology (predominantly depression) is well established among children and young people [40, 41]. A number of studies have investigated the prevalence and severity of PTSD in children living in war zones [12, 28, 33, 35], or in refugee children (usually in western societies) who had been exposed to war [1, 23]. The impact of trauma has been found to be mediated by loss of relatives and support networks, lack of basic health needs, internal displacement or immigration, parental psychopathology, and socioeconomic adversity [20]. Rates of posttraumatic stress disorders decrease in the absence of further exposure to trauma, although there are also continuities with PTSD and depression if not treated [11, 36]. These continuities are compounded by socioeconomic adversity and related life events [2].

There has been limited research on the effectiveness of specific psychological interventions for children living in war zones [25]. However, a number of studies have described or evaluated different models of interventions for PTSD among children who had suffered abuse, experienced natural disasters, or been exposed to community violence. These predominantly adopt psychodynamic or cognitive therapeutic frameworks, and a variety of techniques, with the broad aim of enabling the child to make links between trauma, emotions and beliefs, which can subsequently be challenged and modified. Many of these programs have been defined as variations of 'debriefing' (critical incident stress or psychological) and 'trauma/grief-focused' therapy, although these terms have been used for different types of interventions [9]. These have been designed for the classroom, the family, the individual child, or a group of children exposed to similar events [27].

Debriefing interventions have not been as well evaluated with children as with adult victims of trauma. Galante and Foa [15] developed a seven-session group treatment program for children living in Italian villages, who had been exposed to an earthquake. The treatment aimed at facilitating communication, discussion of

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fears, myths and beliefs, discharge of feelings, and empowerment in building their future. Drawing, storytelling, and role-play were used. The program was found to reduce both earthquake fears and the number of children at risk of developing emotional and behavioural problems. A similar trauma and grief-focused school-based program, consisting of four group and two individual sessions, following an earthquake in Armenia, led to improvement in PTSD but not depressive symptoms [17]. A ten-session group therapy model for adolescent survivors of homicide set up goals of providing grief education, facilitating thoughts and feelings about grief, and reducing traumatic symptoms [30]. The Critical Incident Stress Debriefing (CISD) is a structured group program, which has been widely used in disaster counseling, predominantly with adults, with positive findings [3].

Cognitive-behavioural interventions, mainly in group settings, have been associated with decrease in PTSD symptoms among children who experienced single incident stressors [22] and chronic abuse [6]. Eye movement desensitization and reprocessing (EMDR) is a more recently described intervention, during which the child identifies distressing memories, related imageries and sensations, and trauma-related negative self-cognitions, which are linked to eye movements, before being reprocessed into positive cognitions [29]. Chemtob et al. [4] found that three treatment sessions resulted in substantial reduction of PTSD, anxiety and depressive symptoms in children with prolonged psychopathology, following exposure to a hurricane in Hawaii one year earlier, compared with waiting list controls.

There has been even more limited evidence on the application of such programs in children who experienced war trauma. Group psychosocial support and basic medical care had a superior effect on internally displaced mothers' and children's mental health in post-war Bosnia and Herzegovina [8]. The aim of the program was to promote children's development through parental involvement, support and education, and by strengthening mother-child relationships.

Treatment for adult war victims and refugees such as testimony psychotherapy [39] could be also applied with children. A recently developed psychoeducational treatment program includes cognitive-behavioural techniques and various activities to help children develop coping strategies in the aftermath of war, in order to prevent the need for later treatment [31]. This raises the question whether psychological programs can be used for children exposed to trauma, during (rather than after) ongoing war conflict, i. e. set up as crisis interventions while the trauma continues. This was the rationale for this study.

The aim was to evaluate the short-term impact of a group crisis intervention for children living in a zone of ongoing war conflict. The hypothesis was that children receiving the group crisis intervention would have significantly reduced PTSD and depressive symptoms following the intervention, compared with children receiving education on their symptoms and a no intervention group.

Method

■ Participants

The provinces of the Gaza Strip (North, Gaza, Mid Zone, Khan Younis and Rafah) comprise a narrow zone of land along the Mediterranean Sea, between Israel and Egypt. The Gaza Strip is 50 kilometres long and 5–12 kilometres wide. There are 808,000 registered refugees, over 55 % of whom (443,000) live in refugee camps, and the rest live in the towns and cities of the strip. The United Nations for Relief and Work Agency (UNRWA) provides education for 159,892 pupils, as well as health and relief services to refugees living in and outside the camps. Within the refugee population the life expectancy is 71.7 years, with young people under 15 years of age constituting 43.6 % of the general population. The average refugee family consists of six people [38].

Children for this intervention study were selected from an earlier epidemiological study on the prevalence of PTSD and depression among refugee children living in the Gaza Strip, who comprised the target population [34]. One province (Mid Zone) was selected, with six refugee camps. These were considered representative, as they have the same socioeconomic characteristics with all other refugee camps in the Gaza Strip, all children attend UNRWA schools specifically set up for refugees, and the inhabitants of the selected camps constitute about one-third of the total refugee population. During the summer term, children attend summer camps supervised by their teachers. In these summer camps, children participate in leisure and some educational activities, in boys' or girls' groups of an average of 25 children each. The four selected summer camps were divided into 16 groups, two each per age group and gender. Half of these groups (eight) participated in the epidemiological study, i. e. one each per age group/gender. Out of the two groups of the same age/gender, the one with names of lower alphabetical order was selected. All children from each selected group were invited to take part in the epidemiological study. Of those children, 154 children reported moderate to severe PTSD reactions [34], and were considered eligible for the intervention study reported in this paper. Children were included in the intervention study even if their PTSD scores had decreased to the 'mild' PTSD range by the time of the intervention.

■ **Procedure**

A letter was sent to the UNRWA Education Director, who referred us to the School Counseling Department (Education Department). A meeting was held with the Head of Counselors and four other Counselors. The aim and methods of the study were explained. Ethics approval was granted by the local Helsinki Research Ethics Committee. Written informed consent was sought from parents and children following a description of the study.

Four clinicians (psychiatrist/principal investigator, two psychologists and physician) in cooperation with the teachers, assessed the children before and after the intervention. Children initially engaged by free drawing time, following which the instruments (CPTSD-RI, and short CDI – see below) were distributed. It was stressed to the children that there were no correct or incorrect answers, they were free to withdraw from the study at any point, and could ask for help in completing the scales, or to talk in private about any concerns to the supervising clinician. The study was completed during 6 months of continuous armed conflict in the region.

Intervention groups

As the two active interventions were provided in school, it was not possible to randomize the children. Instead, two each of the six refugee camps were allocated to the following intervention groups, and the potential impact of the area of residence was taken into account in the analysis.

■ **Group 1.** Crisis intervention groups (one for all 31 boys and one for all 16 girls; total N = 47) were moderated by one lead clinician (child psychiatrist), with two other clinicians (psychologist and social worker) acting as facilitators. The treatment protocol of seven weekly sessions was broadly based on Everly and Mitchell [14], and adjusted to the nature of trauma (ongoing political conflict), sociocultural circumstances, and children's developmental ability, by using free drawing, talking about their traumatic experiences and feelings, writing about traumatic events, storytelling, games, and role-play related to the conflict. Children were encouraged to use these communication techniques to describe their direct experience of trauma, losses suffered during the conflict, and the impact of trauma on their family, peers and their community. Children could, thus, talk about events that led to trauma, their perceived impact (feelings), and resulting symptoms (such as anxiety and nightmares). Indeed, they spontaneously equally raised these topics during the group. There was guidance and facilitation by the group moderators, as well as some trauma-specific exercises, but there was no specific structure or order of group themes.

■ **Group 2 (teacher education).** As one refugee camp could not be accessed because of roads closure, one school (N = 22) was involved in Group 2, and this only included female pupils (instead of the targeted N = 50). This was taken into account in the analysis. Four training sessions with the teachers were conducted by the first author on the meaning of trauma, consequences, and how to deal with such problems. Teachers subsequently provided information to children over four sessions on the impact of trauma on different areas of the child's life, and aimed, through education, to normalize the child's response. If children in Groups 1 and 2 expressed more serious symptoms such as prolonged bereavement reaction or suicidal ideation, they were referred to the specialist service following the completion of the group.

■ **Group 3 (no intervention, N = 42).** There were 14 girls and 28 boys. These children were offered the crisis intervention, if their families wished so, after the follow-up assessment.

■ **Measures**

All children were assessed before the intervention and after 3 months. As PTSD and depressive symptomatology are the most commonly reported outcomes of exposure to trauma, measures of these two conditions were included.

Child Post Traumatic Stress Reaction Index (CPTSD-RI) [26]

The CPTSD-RI is a standardized 20-item self-report measure designed to assess posttraumatic stress reactions of children of 6–16 years following exposure to a broad range of traumatic events. It includes three subscales, Intrusion (7 items), Avoidance (5 items) and Arousal (5 items), and three additional items. The scale has been found valid in detecting the likelihood of PTSD [24]. Items are rated on a 0–4 scale, and the range of total CPTSD-RI scores is between 0 and 80. Scores are classified as 'mild PTSD reaction' (total score 12–24), 'moderate' (25–39), 'severe' (40–59), and 'very severe reaction' (above 60) [18]. The CPTSD-RI used in this study was based on DSM-IIIR criteria, rather than using another PTSD instrument based on DSM-IV criteria, as the CPTSD-RI had already been validated in the Arab culture [35, 36].

Children's Depression Inventory (CDI) [21]

The CDI is a standardized self-report questionnaire of depressive symptomatology. This has been developed for children and young people of 6–17 years. The CDI in-

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cludes 27 items, each scored on a 0–2 scale (from 'not a problem' to 'severe'), for the previous 2 weeks. The total score ranges between 0 and 54, and a score of 19 has been found to indicate the likelihood of a depressive disorder [7]. The CDI has been validated in Arabic [16]. This version was used in this study.

Sociodemographic information was collected from the parents. The armed conflict in the region continued throughout the trial.

■ Statistical analysis

In the exploratory analysis, we initially compared the three groups on sociodemographic variables (chi-square or ANOVA), CPTSD-RI and CDI scores at the first assessment (Kruskal-Wallis non-parametric test, as these were not normally distributed), to establish whether the groups had similar characteristics before the intervention. We then explored the changes of CPTSD-RI and CDI scores within each group by Wilcoxon paired ranks test, and compared the three groups on the difference between pre- and post-intervention scores (Kruskal-Wallis test). Changes of clinical

status within each group (i. e. from non-clinical to clinical, or vice versa, according to cut-off scores) were investigated by the marginal homogeneity test. The hypothesis-testing analyses investigated the association between type of intervention (covariate) and changes in CPTSD-RI or CDI scores (dependent variable) in a series of linear regressions. When the dependent variable was defined as category of clinical 'caseness' (according to cut-off scores), the association was tested by logistic regression. If the three groups differed significantly on sociodemographic variables, the regression analyses were repeated, with these variables added as covariates.

Results

Sociodemographic characteristics are presented in Table 1. The large family size and low socioeconomic status were striking across the sample. The three groups did not differ significantly on parental employment status, family size, or family income. As stated earlier, there were only female pupils in the education group. The mean age significantly differed between the three

Table 1 Sociodemographic characteristics

Variable	Intervention group (n = 47)	Education group (n = 22)	No intervention group (n = 42)	Difference (statistical test)
Age				
Mean (range)	12.9 (9–15)	12.3 (10–14)	11.7 (9–15)	ANOVA F = 7.3 (2) p < 0.001
Gender				
Female	15 (32%)	22 (100%)	14 (33.3)	N/A
Male	32 (68%)	0	28 (66.7)	(group two: only females)
Number of siblings				
4 or less	8 (17%)	6 (27%)	8 (19%)	Chi-square = 1.24 (4), ns
5–9	25 (53%)	10 (46%)	20 (47%)	
10 or more	14 (30%)	6 (27%)	14 (33%)	
Family income				
< $300 per month	20 (43%)	11 (50%)	19 (45%)	Chi-square = 0.35 (4), ns
$300–600	22 (47%)	9 (41%)	19 (45%)	
> $600	5 (10%)	2 (9%)	4 (10%)	
Paternal employment				
Unemployed	18 (38%)	7 (32%)	12 (28%)	Chi-square = 14.8 (10), ns
Unskilled worker	10 (21%)	1 (4%)	10 (24%)	
Skilled worker	7 (15%)	7 (32%)	13 (31%)	
Civil service employee	8 (17%)	6 (27%)	4 (12%)	
Merchant	4 (9%)	0	2 (5%)	
Farmer	0	1 (4%)	0	
Maternal employment				
Housewife	40 (85%)	14 (64%)	35 (83.3%)	Chi-square = 8.88 (6), ns
Unskilled worker	2 (4%)	4 (18%)	3 (7.1%)	
Civil service employee	4 (11%)	3 (14%)	4 (9.5%)	
Merchant	0	1 (4%)	0	

groups: ANOVA F (2, N = 111) = 7.3, p < 0.001 (mean age 12.9, 12.3 and 11.7, respectively).

The pre- and post-intervention mean and SD scores are presented in Table 2. The three groups did not differ significantly on any CPTSD-RI or CDI scores at the time of the first assessment (Kruskal-Wallis non-parametric test). Changes of CPTSD-RI or CDI scores were investigated by Wilcoxon test within each group. No significant changes were established (Table 2), with the exception of the decrease in intrusion scores in the intervention group: z (47) = 1.87, p = 0.06, although this did not reach a level of statistical significance. The three groups were not found to differ significantly on the change of scores on each measure (ANOVA): total PTSD score F (2,

N = 111) = 0.54, ns; intrusion F = 0.43, ns; avoidance F (2, N = 111) = 0.11, ns; arousal F (2, N = 111) = 0.12, ns; depression F (2, N = 111) = 1.45, ns.

We then estimated the frequencies of 'caseness', i.e. the likelihood of PTSD or depressive disorders, using previously established cut-off scores, whilst acknowledging potential limitations in the absence of diagnostic psychiatric interviews. When moderate and severe PTSD reactions were grouped together as 'cases likely to require assessment and treatment', the rates of children fulfilling these criteria were high, ranging from 57 % to 86 % at the first assessment (which was expected, as these were selection criteria from an earlier epidemiological study [34]. There were significantly more proba-

Table 2 Posttraumatic stress and depression scores pre- and post-intervention (mean and standard deviation scores)

Outcome measure	Intervention group (n = 47)	Education group (n = 22)	Non-intervention group (n = 42)
CPTSD-RI			
Total score mean (SD)			
Pre-	29.5 (11.9)	33.0 (7.9)	29.6 (11.4)
Post-	28.3 (13.4)	32.2 (8.7)	31.0 (12.6)
Change (Wilcoxon test)	z = 0.48, ns	z = 0.16, ns	z = 0.73, ns
Intrusion score			
Pre-	10.9 (5.3)	12.2 (3.5)	11.4 (4.7)
Post-	9.3 (5.4)	11.6 (4.4)	10.6 (5.1)
Change (Wilcoxon test)	z = 1.87, p = 0.06	z = 0.09, ns	z = 1.15, ns
Avoidance score			
Pre-	7.4 (3.5)	8.4 (2.8)	7.2 (4.0)
Post-	7.2 (4.0)	7.9 (3.1)	7.3 (3.6)
Change (Wilcoxon test)	z = 0.10, ns	z = 0.73, ns	z = 0.13, ns
Arousal score			
Pre-	7.5 (4.4)	7.9 (3.4)	7.4 (3.4)
Post-	7.3 (4.0)	7.2 (3.0)	8.1 (4.3)
Change (Wilcoxon test)	z = 0.29, ns	z = 0.49, ns	z = 1.02, ns
% of likely PTSD (moderate or severe reaction)			
Pre-			
CPTSD-RI score below 25 cut-off	19 (40 %)	3 (14 %)	18 (43 %)
CPTSD-RI score 25 or above	28 (60 %)	19 (86 %)	24 (57 %)
Post-			
CPTSD-RI score below 25 cut-off	20 (43 %)	4 (18 %)	17 (40 %)
CPTSD-RI score 25 or above	27 (57 %)	18 (82 %)	25 (60 %)
Change (Marginal Homogeneity test)	SD MH statistic = 3.32, ns	SD MH statistic = 2.83, ns	SD MH statistic = 2.23, ns
CDI score M (SD)			
Pre-	12.9 (8.1)	11.9 (7.2)	14.4 (7.8)
Post-	14.3 (9.7)	12.1 (7.6)	13.0 (7.5)
Change (Wilcoxon test)	z = 0.89, ns	z = 0.34, ns	z = 1.2, ns
% of likely depression			
Pre-			
CDI score below 19 cut-off	34 (72 %)	18 (82 %)	31 (74 %)
CDI score 19 or above	13 (28 %)	4 (18 %)	11 (26 %)
Post-			
CDI score below 19 cut-off	28 (60 %)	17 (77 %)	29 (69 %)
CDI score 19 or above	19 (40 %)	5 (23 %)	13 (31 %)
Change (Marginal Homogeneity test)	SD MH statistic = 3.16, p = 0.058	SD MH statistic = 2.23 ns	SD MH statistic = 2.83 ns

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ble PTSD cases in the education group at the first assessment: chi-square = 6.03 (2, N = 111), p < 0.05. This difference ceased to exist at follow-up: chi-square = 4.19 (2, N = 111), ns. There was no significant change from clinical to non-clinical PTSD range within any of the groups (Marginal Homogeneity test, Table 2).

The rates of likely depression were lower than PTSD, but still substantive, ranging from 18 % to 28 % at the first assessment, and did not differ significantly between the three groups at the first assessment: chi-square = 0.75 (2, N = 111), ns; or at follow-up chi-square = 2.29 (2, N = 111), ns. There was a slight increase of likely depression rates in each of the three groups, which reached almost significant level in the crisis intervention group (Marginal Homogeneity test): SD of MH Statistic (47) = 3.16, p = 0.058.

As the three groups differed on children's age, gender (whilst acknowledging that there were no boys in the education group), and area of residence (which may have been exposed to more conflict, hence maintaining PTSD symptoms), these three variables were entered as covariates in five series of linear regression analyses, with the change on each outcome measure as the dependent variable. No association was found between the covariates and changes in measures of psychopathology (Table 3). In order to account for a potential interaction between the area of residence (as different refugee camps may have been exposed to different level of trauma) and the type of intervention, a new variable of the interaction between these two variables (area and intervention) was added as covariate in the previous regression analyses. This new variable was not found to predict change in child psychopathology either. Again, it needs to be acknowledged that one of the interventions (education) was only provided for female pupils, i.e. gender may have been a confounder in this analysis.

Finally, outcome was defined as the category of 'caseness' (below the cut-off score) on either the CPTSD-RI or CDI after the intervention, in two logistic regression analyses. The crisis intervention was not significantly associated with absence of PTSD, compared with the control group (Odds Ratio = 0.92, 95 % Confidence Interval = 0.39, 2.14, ns), but there was a trend (albeit not

significant) of improvement following education, compared with the control group (OR = 3.06, 95 % CI = 0.88, 10.6, ns). When outcome was defined as absence of depression, neither group was superior to the controls (crisis intervention: OR = 1.51, 95 % CI = 0.63, 3.63, ns; education: OR = 0.66, 95 % CI = 0.20, 2.16, ns). The addition of sociodemographic variables as covariates in the multiple regression analysis did not alter the findings.

Discussion

As previous intervention studies had targeted victims of past trauma, including refugee or displaced children who had experienced war, the aim of this study was to evaluate a crisis intervention during ongoing war trauma. The intervention included relatively non-active techniques such as drawing, free play, storytelling and expression of feelings about the conflict, in order to reduce children's stress and depressive reactions during exposure to war trauma. The hypothesis of superior short-term outcome following the intervention compared with an educational intervention or no intervention was not confirmed.

The nature of the study and the characteristics of the conflict constrained the methodology, as we could not randomize children to the three groups. Other limitations were: not investigating the process of the intervention, not involving parents, the large size and developmental heterogeneity of the intervention groups, and the different treatment requirements for PTSD and depression, as well as not measuring exposure to violence during the intervention period.

Three possible explanations can be considered for these findings. Children's exposure to continuous direct (witnessing shelling, raids or shooting) and indirect trauma (through adults or the media) [37] may have sustained their stress reactions despite the treatment provision. Transient treatment benefits (which were not measured during the intervention) may have been lost following the recurrence of violence. This mechanism draws parallels with children who are being abused, and whose protection is paramount before the initiation of treatment. In the case of a war zone, of course, children's safety is beyond the control of health and voluntary agencies, but this is still a powerful message to calls for depoliticized international aid, predominantly by UN forces [32], but also physicians and health organizations acting as children's advocates wherever possible.

Interventions for children with posttraumatic stress disorders have usually been developed for specific traumatic events or 'critical' incidents, such as natural disasters or single incidents of community violence [13, 27]. Several of these programs have been developed for adults [3, 19], while others have been initiated well after the end of the trauma [5]. Therefore, future interven-

Table 3 Linear regression analyses between intervention group (covariate), and changes in CPTSD-RI and CDI scores (dependent variables)

Dependent variable	B	95 % Confidence Interval	Level of significance (p)
Total CPTSD-RI score	1.12	−1.20, 3.45	ns
Intrusion score	0.49	−0.67, 1.65	ns
Avoidance score	0.43	−0.73, 0.97	ns
Arousal score	0.40	−0.72, 0.93	ns
Total CDI score	−1.45	−3.15, 0.23	p = 0.091

tions will need to be adapted to the particular nature of ongoing armed conflict, for example, the impact of loss of relatives and friends on children, their arising fears or anger, and the normalization of aspects of their everyday lives, as far as humanly possible [20]. Their structure and duration will need modifications, i. e. lengthier input and booster treatment sessions. The involvement of the family in crisis intervention also needs to be considered [10, 42], as we may have reached different conclusions had this intervention also targeted parents.

The focus and specificity of the intervention are essential in interpreting the findings. Different terms have been used in the literature, such as 'debriefing, psychological debriefing, or critical incident stress debriefing' [10] to describe different kinds of programs with preventive (to help children cope with exposure to trauma, irrespective of mental health presentation) or treatment (usually to reduce PTSD reactions) objectives. These interventions include variable active components such as cognitive techniques. The heterogeneity of target groups and treatment programs, even in studies with adult victims of accidents and natural disasters, may underlie the inconclusive findings on the effectiveness of psychological debriefing, with some studies questioning the potential deterioration of problems [19], such as the increase of depressive symptoms in this study. They may also indicate that the 'crisis group' should have contin-

ued for more sessions, or that we should have focused more on enhancing children's coping strategies. The above methodological reasons, however, suggest that the findings cannot be generalized to other related interventions.

In the absence of previous evidence, we defined the group crisis intervention as fairly inactive, hypothesizing that this might help children develop strategies in externalizing the conflict or bolstering their avoidance, and this might well explain the negative findings. Although we used non-verbal developmentally appropriate techniques such as drawing, free play and role-play to engage the children, a substantial proportion may have found it difficult to share their traumatic experiences, cognitions and emotions. In other words, such interventions may help engage children, but are not in themselves sufficient to reduce stress reactions. Inclusion of more active cognitive tasks [4, 31] or psychodynamic techniques [17, 39] would enhance future interventions. These should make a clear distinction between prevention and treatment in their objectives, while comorbid psychiatric disorders such as depression would require detection and specialist treatment.

References

1. Almqvist K, Brandell-Forsberg M (1997) Refugee children in Sweden: posttraumatic stress disorder in Iranian preschool children exposed to organized violence. Child Abuse and Neglect 21:351–366
2. Becker D, Weine S, Vojvoda D, McGlashan T (1999) PTSD symptoms in adolescent survivors of "ethnic cleansing": results from a one-year study. J Am Acad Child Adolesc Psychiatry 38:775–781
3. Campfield K, Hills A (2001) Effect of timing of critical incident stress debriefing (CISD) on posttraumatic symptoms. J Trauma Stress 14:327–340
4. Chemtob C, Nakashima J, Carlson J (2002) Brief treatment for elementary school children with disaster-related posttraumatic stress disorder. J Clin Psychol 58:99–112
5. Chemtob C, Tomas S, Law W, Cremniter D (1997) Post disaster psychosocial intervention: a field study of the impact of debriefing on psychological distress. Am J Psychiatry 154:415–417
6. Cohen J, Mannarino A (1997) A treatment study for sexually abused preschool children: outcome during a one-year follow-up. J Am Acad Child Adolesc Psychiatry 36:1228–1235

7. Costello E, Angold A (1988) Scales to assess child and adolescent depression: checklists, screens, and nets. J Am Acad Child Adolesc Psychiatry 27:726–737
8. Dybdahl R (2001) Children and mothers in war: an outcome study of a psychosocial intervention program. Child Dev 72:1214–1230
9. Dyregrov A (1999) Helpful and hurtful aspects of psychological debriefing groups. Int J Emerg Ment Health 1:175–181
10. Dyregrov A (2001) Early intervention: a family perspective. Adv Mind Body Med 17:168–174
11. Dyregrov A, Gjestad R, Raundalen M (2002) Children exposed to warfare: a longitudinal study. J Trauma Stress 15:59–68
12. Dyregrov A, Gupta L, Gjestad R, Mukanoheli E (2000) Trauma exposure and psychological reactions to genocide among Rwandan children. J Trauma Stress 13:3–21
13. Dyregrov A, Solomon R, Fredrik-Bassoe C (2000) Mental mobilization processes in critical incident stress situations. J Emerg Ment Health 2:73–81

14. Everly GS, Mitchell JT (1999) Critical Incident Stress Management (CISM): a new era and standard of care in crisis intervention (2nd ed). Chevron Publishing Corporation, Ellicott City, MD
15. Galante R, Foa D (1986) An epidemiological study of psychic trauma and treatment effectiveness for children after a natural disaster. J Am Acad Child Psychiatry 25:357–363
16. Gharib A (1985) Arabic Version of CDI. El Nahda El Masrya, Cairo
17. Goenjian A, Karayan I, Pynoos R, Minassian D, Najarian L, Steinberg A, Fairbanks L (1997) Outcome of psychotherapy among early adolescents after trauma. Am J Psychiatry 154:536–542
18. Goenjian A, Pynoos R, Steinberg A, Najarian L, Asarnow J, Karayan I, Ghurabi M, Fairbanks L (1995) Psychiatric comorbidity in children after the 1988 earthquake in Armenia. J Am Acad Child Adolesc Psychiatry 34:1174–1184
19. Hobbs M, Mayou R, Harrison B, Worlock P (1996) A randomized controlled trial of psychological debriefing for victims of road traffic accidents. BMJ 313:1438–1439

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20. Husain S, Nair J, Holcomb W, Reid J, Vargas V, Nair S (1998) Stress reactions of children and adolescents in war and siege conditions. Am J Psychiatry 155: 1718–1719

21. Kovacs M (1985) The Children's Depression Inventory (CDI) Psychopharmacol Bull 21:995–998

22. March J, Amaya-Jackson L, Murray M, Schulte A (1998) Cognitive-behavioural psychotherapy for children and adolescents with posttraumatic stress disorder after a single-incident stressor. J Am Acad Child Adolesc Psychiatry 37: 585–593

23. McCloskey L, Southwick K (1996) Psychosocial problems in refugee children exposed to war. Pediatrics 97:394–397

24. Nader ON, Pynoos R, Fairbanks L, Al-Ajeel M, AlAsfour AA (1993) Preliminary study of PTSD and grief among the children of Kuwait following the Gulf Crisis. Br J Clin Psychol 32:307–416

25. Perrin S, Smith P, Yule W (2000) The assessment and treatment of posttraumatic stress disorders in children and adolescents. J Child Psychol Psychiatry 41:277–289

26. Pynoos R, Frederick C, Nader K (1987) Life threat and posttraumatic stress in school-age children. Arch Gen Psychiatry 37:629–636

27. Pynoos R, Nader K (1988) Psychological first aid and treatment approach to children exposed to community violence: research implications. J Trauma Stress 1:444–473

28. Qouta S, Punamaki R, El Sarraj E (2003) Prevalence and determinants of PTSD among Palestinian children exposed to military violence. Eur Child Adolesc Psychiatry 12:265–272

29. Rogers S, Silver S (2002) Is EMDR an exposure therapy? A review of treatment protocols. J Clin Psychol 58:43–59

30. Salloum A, Avery L, McClain R (2001) Group psychotherapy for adolescent survivors of homicide victims. J Am Acad Child Adolesc Psychiatry 40: 1261–1267

31. Smith P, Dyregrov A, Yule W (2002) Children and war: teaching survival techniques. Children and War Foundation, Bergen

32. Southall D, Abbasi K (1998) Protecting children from armed conflict. BMJ 316:1549–1550

33. Stein B, Comer D, Gardner W, Kelleher K (1999) Prospective study of displaced children's symptoms in wartime Bosnia. Soc Psychiatry Psychiatr Epidemiol 34:464–469

34. Thabet AA, Abed Y, Vostanis P (2004) Comorbidity of PTSD and depression in refugee children during war conflict. J Child Psychol Psychiatry 45:533–542

35. Thabet AA, Vostanis P (1999) Posttraumatic stress reactions in children of war. J Child Psychol Psychiatry 40: 385–391

36. Thabet AA, Vostanis P (2000) Posttraumatic stress reactions in children of war: a longitudinal study. Child Abuse and Neglect 24:291–298

37. Thabet AA, Abed Y, Vostanis P (2002) Emotional problems in Palestinian children living in war zones. Lancet 359: 1801–1804

38. United Nations for Relief and Work Agency (1999) Factors and figures: the situation in the Gaza Strip and the West Bank. United Nations, Gaza

39. Weine S, Kulenovic A, Pavkovic I, Gibbons R (1998) Testimony psychotherapy in Bosnian refugees. Am J Psychiatry 155:1720–1726

40. Yule W (1992) Posttraumatic stress disorder in child survivors of shipping disasters: the sinking of 'Jupiter'. Psychother Psychosom 57:200–205

41. Yule W (1999) Post traumatic stress disorder. Arch Dis Child 80:107–109

42. Zivcic I (1993) Emotional reactions of children to war stress in Croatia. J Am Acad Child Adolesc Psychiatry 32: 709–713