Effectiveness of school-based debriefing sessions for Palestinian children affected by war and trauma

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Abstract

Background: There are no psychosocial interventions to address children psychosocial needs among Palestinian children area of war and conflict.

Aim: To evaluate the school-based debriefing sessions for children living in a zone of ongoing war conflict.

Method: A randomly selected sample of 240 children aged 10-16 years who were affected by the current conflict in the Gaza Strip were interviewed about their war experiences and reactions to the violence before and after participating in the 2-week intervention in schools for 8 session.

Results: Children themselves reported decrease in all mental health problems after the intervention. However parents disagreed with their children and reported no change in behavioural and emotional problems of their children after the intervention.

Conclusion: Our findings that using school based counseling setting in time of war and trauma could improve children mental health if they report their feelings themselves and not their parents. This highlight the need for more long acting and new methods of intervention for children living in area of war and conflict such as cognitive behaviour therapy and social skills training to enable children cope with trauma and stress.

Introduction

There has been increasing number of research on the effectiveness of specific psychological interventions for children living in war zones (Gupta and Zimmer, 2008). 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 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. Herman (1997) outlined three phases of treatment for traumatized children: the establishment of safety, remembrance and mourning, and reconnection with ordinary life.

Research on young people who had PTSD as a result of exposure to a disaster includes that by Chemtocb, Nakashima, and Carlson (2002) examining adolescents with PTSD 2-3 years following exposure to a disaster, and that by Goninan et al. (1997) in which CBT for PTSD began 1.5 years after exposure to a disaster. These studies both indicate that children who have significant PTSD symptoms benefit from CBT intervention for both the PTSD and related difficulties such as depression, social competence and behavioural problems. Three randomized, controlled psychosocial treatment studies of sexually abused children with acute PTSD symptoms also demonstrate the superiority of CBT compared with non-directive supportive therapy or usual treatment in the community (Cohen, 2003). A comprehensive review by Ramchandi and Jones (2003) on treatment available for children who have suffered sexual abuse concluded that, ‘cognitive behavior therapy for children who are symptomatic’ (including suffering from PTSD) ‘has the strongest research evidence for efficacy’. In addition, Feeny et al. (2004) established that CBT and related techniques have been empirically proven to benefit the emotional well-being of young clients suffering from trauma-related psychological concerns such as PTSD. Relaxation techniques, problem solving, aggression management, grief resolution, narratives, and stress inoculation are examples of ways to help children and teens cope with natural disasters (Feeny et al., 2004). Feeny et al. also supported the use of psychoeducational groups where children experiencing trauma-related symptoms can meet, share their stories and reactions, gain a sense of cohesion and universality, and learn how to better cope with their feelings, thoughts, and behaviors. When using CBT with individual children or groups, Feeny et al. found that short-term counseling (i.e., 4 sessions) was as effective as treatments involving larger numbers of sessions (i.e., 12 sessions). Also, group interventions were as successful as individual counseling interventions in treating children's symptoms. Finally, the authors found that starting the counseling process soon after the disaster or traumatic event was more effective in the long run. A randomized controlled
study evaluating the effectiveness of a group CBT treatment package for a cohort of schoolchildren in Los Angeles, USA, who had PTSD symptoms as a result of living in a community with high levels of violence, found clinically significant improvements which were maintained at 6-month follow-up (Stein et al., 2003). In another study of Sierra Leone children to determine whether rapid education intervention reduced trauma symptoms found that intrusion and arousal symptoms decreased after such intervention, while avoidance reactions increase (Gupta and Zimmerman, 2008).

The aim of the study was to evaluate the school-based counseling sessions for children living in a zone of ongoing war conflict. The hypothesis was that, children receiving the intervention would have significantly reduced mental health symptoms following the intervention.

**Methods**

**Subjects**

A total of 240 children aged 10-16 years randomly selected from three public schools in the Gaza Strip schools registration lists provided by the Ministry of Education. All children were interviewed in their schools were selected from. The sampled consisted of 240 children, age ranged from 10 - 16 years the average age (12.2 years). There were 186 boys (77.5%) and 54 girls (22.5%). Of the total children, 33.3% of children live Khan Younis, 35.4% live Deir-El-Balah area, and 31.3% live in Gaza city. A total of 80% of the pre-test sample was re-interviewed for the post-test 2 weeks after completing the intervention resulting in a 20% reduction in the post-test sample (n=192). A detailed written and verbal explanation of the purpose of the assessment, confidentiality issues and the voluntary nature of the survey was provided to the teachers and parents of the children prior to administering the interviews. Written authorization to participate in the assessments and the intervention was obtained by the team staff from camp supervisors in the presence of the children. Verbal permission was also obtained from each child before conducting the interviews.

**Procedure**

Pre-test assessment was applied to children one week before starting the school-based sessions (children were involved in 8 sessions in two weeks time). The sessions consisted of providing a safe environment to share children traumatic experiences, providing accurate information about the trauma to clarify misunderstandings, drawing pictures about one of their worst memories, sharing their drawing, story telling about experiences and discussion among themselves about the meaning and solutions, dream analysis, taking part in role-plays of similar traumatic events, and mentioning last dreams concerning the traumatic events. Each group consisted of 25 children. After one week of finishing the interventions sessions, the same assessment tools were used to find the effectiveness of such intervention on reducing children behavioural and emotional problems. The data collected during the time of Sept 2007- Jan 2008 by 8 psychologists and psychiatric nurses working the field of children victims of trauma and war.

**Instruments**

**Sociodemographic data:**

The children demographic data was collected by questionnaire include sex, age, class, and place of residence.

**Gaza Child Health Study Scales (Miller et all, 1999)**

The Gaza Child Health Study Scale was developed and validated in the Gaza Strip and West Bank in a sample of Palestinian children (Miller et al. 1999). The original OCHS assesses problem behavior symptoms associated with DSM-III childhood psychiatric disorders (Boyle, Offord, Racine, Szatmari, & Sanford, 1993) and contains items adapted from the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1981). The modified GCHSS contains 34 symptom items rated on a 3-point Likert-type scale ranging from 0 (rarely applies) to 2 (certainly applies). Broadband scales are computed to assess internalizing (e.g., worries about things in the future; needs to be told over and over that things are okay) and externalizing (e.g., kicks, bites, or hits other children; defiant, talks back to adults) symptoms. This version consists of 34 items measures (conduct-15 items, hyperactivity-6 items, depression-5 items, obsession-4, and overanxious-3 items) the emotional and behavioural problems of children rated by parents if the children 6-11 years and by children themselves if the were 12 years and more. The score range from 0= not true, 1= sometimes, 2= true. The reliability test of the scale was Cronbach’s alpha =

**Results of the study**

**Sociodemographic data**

The total number of children in the selected for this study were 240 children, children age ranged from 10-16 years with mean 12.2 years (SD=1.36). According to sex, 77.5% were boys and 22.5% were females. According to place of residence, 33.3% of children live in the province of Khan Younis area, 35.4% live in Deir El-Balah, and 31.3% live Gaza city. According to grades, 19.6% were in the fifth grade, 31.3% were in the sixth grade, 13.8% were in the seventh grade, and 35.4% were in eighth grade.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Sociodemographic data for children in the sample (N= 240)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>N</td>
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<tr>
<td>Male</td>
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</tr>
<tr>
<td>Female</td>
<td>54</td>
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<tr>
<td>Level of study</td>
<td></td>
</tr>
<tr>
<td>Five</td>
<td>47</td>
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<tr>
<td>Sex</td>
<td>75</td>
</tr>
<tr>
<td>Seven</td>
<td>33</td>
</tr>
<tr>
<td>Eight</td>
<td>85</td>
</tr>
<tr>
<td>Place of residence</td>
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<tr>
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<tr>
<td>Deir el-Balah</td>
<td>85</td>
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<td>Gaza City</td>
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</table>

**Results of Gaza Child Health Study Scale- children 12 years old and above report**

**Pre assessment results**

In order to investigate the effectiveness of the intervention, children 12 years old and above were interviewed one week before the intervention. The results showed that mean GCHSS before was 14.82 (SD = 7.98), conduct problems mean was 4.27 (SD = 4.08); hyperactivity mean was 3.84 (SD = 2.08), depression mean was 2.96 (SD = 1.82), obsessive mean was 3.63 (SD = 1.89), and overanxious mean was 1.86 (SD = 1.26).
Post assessment results

In order to investigate the effectiveness of the intervention, children were interviewed one week after the intervention. The results showed that mean GCHSS was 6.6 (SD = 3.83), conduct problems mean was 4.02 (SD =4.32); hyperactivity mean was 2.82 (SD = 2.11), depression mean was 2.31 (SD =1.78), obsessive mean was 3.19 (SD = 1.91), and overanxious mean was 1.45 (SD = 1.26).

Table 2: Paired T test of GCHSS-Child report

<table>
<thead>
<tr>
<th></th>
<th>First assessment</th>
<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
<th>Mean Diff.</th>
<th>SD</th>
<th>t</th>
<th>p</th>
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<td>Gaza Child Health Study Scale</td>
<td>Conduct</td>
<td>4.28</td>
<td>0.68</td>
<td>6.02</td>
<td>4.32</td>
<td>0.25</td>
<td>4.7</td>
<td>0.56</td>
<td>0.57</td>
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<tr>
<td></td>
<td>Hyperactivity</td>
<td>3.84</td>
<td>2.08</td>
<td>2.82</td>
<td>2.11</td>
<td>1.01</td>
<td>2.3</td>
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<td></td>
<td>Depression</td>
<td>2.96</td>
<td>1.82</td>
<td>2.31</td>
<td>1.78</td>
<td>0.65</td>
<td>2.1</td>
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<td></td>
<td>Obsessive</td>
<td>3.62</td>
<td>1.89</td>
<td>3.19</td>
<td>1.91</td>
<td>0.43</td>
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<td></td>
<td>Overanxious</td>
<td>1.96</td>
<td>1.26</td>
<td>1.45</td>
<td>1.26</td>
<td>0.41</td>
<td>1.5</td>
<td>2.77</td>
<td>0.007</td>
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</tbody>
</table>

Results of Gaza Child Study Scale report-parents form for children 11 years old and less

Pre assessment results

In order to investigate the effectiveness of the intervention, parents of children 11 years and less were interviewed one week before the intervention. The results showed that mean GCHSS before was 9.45 (SD =7.04), conduct problems mean was 3.34 (SD =4.08); hyperactivity mean was 3.69 (SD = 2.48), depression mean was 1.82 (SD 2.21), obsessive mean was 2.76 (SD =1.78), and overanxious mean was 1.87 (SD = 1.60).

Post assessment results

In order to investigate the effectiveness of the intervention, parents of children 12 years old and above were interviewed one week after the intervention. The results showed that mean GCHSS was 6.56 (SD =4.12), conduct problems mean was 3.32 (SD = 4.66); hyperactivity mean was 3.27 (SD = 2.66), depression mean was 1.84 (SD =2.11), obsessive mean was 2.78 (SD =1.99), and overanxious mean was 1.71 (SD = 1.53).

Differences in child mental health between the two stages of intervention using Paired T test of GCHSS –child

In order to find the effectiveness of the intervention, a paired T test was done to find the differences between pre assessment and post assessment period.

The results showed that there were statistically significant differences between the mean of total GCHSS before and after intervention in schools. This mean differences between the two times was 2.76 (t=2.9, p = 0.004), no statistically significant differences between the mean of conduct disorder before and after intervention in schools. This mean differences between the two times was 0.25 (t=4.5, p = ns), there were statistically significant differences between the mean of total hyperactivity disorder in children before and after intervention in schools. This mean differences between the two times was 1.01 (t=4.5, p = 0.001), there were statistically significant differences between the mean of total depression disorder in children before and after intervention in schools. This mean differences between the two times was 0.65 (t=3.2, p = 0.002), there were statistically significant differences between the mean of total obsessive disorder in children before and after intervention in schools. This mean differences between the two times was 0.41 (t=2.11, p = 0.03). There were statistically significant differences between the mean of total anxiety disorder in children before and after intervention in schools. This mean differences between the two times was 0.41 (t=2.77, p = 0.007).

Differences in child mental health between the two stages of intervention using Paired T test of GCHSS –parents form

In order to find the effectiveness of the intervention, a paired T test was done to find the differences between pre assessment and post assessment period according to parents report.

The results showed that there were no statistically significant differences between the mean of total GCHSS before and after intervention in schools. This mean differences between the two times was 0.46 (t=0.04, p = ns), the was also applicable to all other subscales (conduct, hyperactivity, depression, obsession, and anxiety)

Table 3: Paired T test of GCHSS-Parents report

<table>
<thead>
<tr>
<th></th>
<th>First assessment</th>
<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
<th>Mean Diff.</th>
<th>SD</th>
<th>t</th>
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<tbody>
<tr>
<td>Gaza Child Health Study Scale</td>
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<td>3.346</td>
<td>3.968</td>
<td>3.32</td>
<td>4.66</td>
<td>0.24</td>
<td>4.5</td>
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<tr>
<td></td>
<td>Hyperactivity</td>
<td>3.691</td>
<td>2.483</td>
<td>3.27</td>
<td>2.66</td>
<td>0.41</td>
<td>2.4</td>
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<td></td>
<td>Depression</td>
<td>1.829</td>
<td>2.216</td>
<td>1.84</td>
<td>2.11</td>
<td>-0.01</td>
<td>2.1</td>
<td>-0.05</td>
<td>0.996</td>
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<td></td>
<td>Obsessive</td>
<td>2.765</td>
<td>1.780</td>
<td>2.78</td>
<td>1.99</td>
<td>0.12</td>
<td>2.33</td>
<td>0.047</td>
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<td></td>
<td>Overanxious</td>
<td>1.877</td>
<td>1.608</td>
<td>1.71</td>
<td>1.53</td>
<td>1.16</td>
<td>1.60</td>
<td>0.90</td>
<td>0.36</td>
</tr>
</tbody>
</table>

Discussion

Before discussing the results of this study, it is important to note that the study has number of limitations. During the second phase of the study there was oscillation of the internal fighting the Gaza Strip between the Palestinian factions which affecting the data collection of the post assessment stage, added to the repeated incursions of the Gaza Strip by Israelis military forces which may increase the traumatic events and reactions beside the siege of Gaza Strip. Also, the main outcome measures were questionnaire-based self report rather than interview. These limitations leave considerable room for improvement in future studies. Nevertheless, bearing these caveats in mind, there were several interesting findings in the present study.
Children who participated in the school-based intervention reported a significant decrease in overall behavioural and emotional symptoms. However, parents and teachers reported no significant improvements in their children's overall behaviour and emotional symptoms following their attendance at the group.

Our study consisted with other studies using other types of therapy. Kimmerly et al (2005) study to evaluate the effectiveness of a cognitive-behavioural therapy (CBT) techniques school-based group intervention designed for children who have experienced trauma. Twenty-six children (aged 11–15 years) who were refugees or asylum-seekers from war-affected countries participated. The manual-based intervention consisted of and was implemented within secondary schools. Children in the CBT group showed statistically significant, but clinically modest improvements following the intervention, with decreases in overall severity of post-traumatic stress symptoms. Significant improvements were also found in overall behavioural difficulties and emotional symptoms. Children in the waiting list control group did not show any improvements over the same period. However, follow-up data, which were only available for a small subset of eight children, suggest that gains in the CBT group were not maintained at 2-month follow-up. In another study of children using debriefing. However others such as Stallard et al (2006) in a study aimed to determine whether an early intervention using a psychological debriefing format is effective in preventing psychological distress in children road traffic accident survivors in which 158 children aged 7–18 were followed up after completed eight months post accident with 132 (70.8% of the experimental group and 62.7% in the control group). Main outcome measures: Self-completed measures of psychological distress; fulfillment of diagnostic criteria for post-traumatic stress disorder. Results: Children in both groups demonstrated considerable improvements at follow-up. The early intervention did not result in any additional significant gains. Thabet et al (2008 in press) in study the effectiveness of expressive writing therapy technique for Palestinian children in the Gaza Strip found that children anxiety symptoms decreased after 6 sessions of writing, while PTSD and depression did not change.

Conclusion

Our findings that using school based counseling setting in time of war and trauma could improve children mental health if they report their feelings themselves and not their parents. This highlight the need for more long acting and new methods of intervention for children living in area of war and conflict such as cognitive behaviour therapy and social skills training to enable children cope with trauma and stress.

References