The psychosocial aspects of children exposed to war: practice and policy initiatives

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The atrocities of war have detrimental effects on the development and mental health of children that have been documented since World War II. To date, a considerable amount of knowledge about various aspects of this problem has been accumulated, including the ways in which trauma impacts child mental health and development, as well as intervention techniques, and prevention methods. Considering the large populations of civilians that experience the trauma of war, it is timely to review existing literature, summarize approaches for helping war-affected children, and suggest future directions for research and policy. **Keywords:** War, children, psychopathology, assessment, treatment, policy.

‘There never was a good war or a bad peace.’
(Benjamin Franklin, Letter to Quincy, 11 September 1783)

Despite increasing discussion in recent years (for major reviews see Jensen & Shaw, 1993; Klingman, 2002a; Laor & Wolmer, 2002; Richman, 1993; Yule, 2000), the impact of armed conflict on children’s lives and mental states has too often been minimally addressed or even unrecognized (Machel, 1996, 2001). Children under war-time duress are largely a voiceless population whose rights and needs are often subordinate to those of soldiers, and the necessities of war. Children have been murdered, raped, maimed, starved, exposed to brutality, and subject to lack of control and chaos (Machel, 2001). In the past ten years, approximately two million children have been killed in war zones, and six million injured or permanently disabled (Bellamy, 2002; UNICEF, 1996). Between 80 and 90% of those who die or are injured in conflicts are civilians – mostly children and their mothers. Of war-exposed survivors, 1 million children have been orphaned (Bellamy, 2002; Plunkett & Southall, 1998) and 20 million displaced to refugee or internally displaced person’s camps (Machel, 2001). Some contemporary ethnic struggles have employed techniques of ethnic cleansing and genocide specifically targeted towards children (UNICEF, 1996).

In wartime, children may be exposed to a large number of traumatic events, including bombing, shelling, and sniper-fire (Amnesty International, 1996), that often result in the loss of family members, friends, community and social support structures (Machel, 1996). Beyond the risk of physical injury, and direct threats to life, these traumas are often multiple, severe, and chronic (Kinzie, 2001). In addition, children are often exposed to other risks associated with war-like situations, often more so than adults. For example, 75% of the injuries incurred from landmines in the rural areas of Somalia were to children between the ages of five and fifteen years old (ICRC, 1994).

Despite these stark facts, children during and after wars seldom receive the attention and assistance required to cope with what they have experienced and to support healing and further development (Machel, 1996). There is a growing need to increase public awareness of child exposure to atrocities, to understand the impact of such atrocities on mental health and development, and most importantly, to develop programs to curb and heal the effects of war experiences on children and youth. This discussion will outline the major areas that require specific attention, including assessment, culturally sensitive approaches to diagnostic and treatment issues, consideration of the psychosocial aspects of healing, the role of mental health professionals in working with children exposed to war, and will conclude by making recommendations for future research.

**Traumatic events and symptoms**

**Assessment of events**

Understanding the effects of war trauma on children has been complicated by the use of different approaches to the assessment of war events themselves, although the most commonly used measure is the Child War Trauma Questionnaire (CWTQ), which was developed by Macksoud and colleagues (Macksoud, 1992; Macksoud, Dyregrov, & Raundalen, 1993; Macksoud & Aber, 1996) for use in Lebanon after the war with Israel, and then subsequently used with some modifications across different settings (e.g., Dyregrov, Gjestad, & Raundalen, 2002; Miller, El-Masri, Allodi, & Qouta, 1999). This measure (as well as other available measures, see for example Allwood, Bell-Dolan, & Husain, 2002; Kuterovac-Jagodic, 2003) uses a list of different events (varying in their severity and potential effects on children) and the
number of times the child encountered them, which are then summed together to produce a total score for predicting the impact of war on child mental health. Such an approach is understandable, as the atrocities of war may differ from place to place; also, several studies have demonstrated the existence of an additive ‘dose of exposure’ effect, with higher levels of exposure producing more severe reactions (e.g., Allwood et al., 2002; Hadi & Llabre, 1998; Laor, Wolmer, & Cohen, 2001). However, while the number of war traumas experienced by a child is related to the number of PTSD symptoms, various types of traumas relate differentially to PTSD, and other mental health outcomes. Some events may have only moderate, if any, effects on child mental health, whereas the effects of others may be devastating. To date, however, only a few studies have attempted to assess the impact of any specific event on child symptomatology and adjustment (e.g., Allwood et al., 2002; Durakovic-Belko et al., 2003; Macksoud & Aber, 1996; Smith, Perrin, Yule, Hacam, & Stuvland, 2002).

An additional issue is that the effect of any particular event may differ in its degree of impact on any particular individual, and is related both to emotional and physical proximity (Pfefferbaum, 1997), and to individual factors, such as premorbid personality (e.g., Schnur, Friedman, & Rosenberg, 1993), or pre-existing psychopathology (Masten, Best, & Garmezy, 1990; Perrin, Smith, & Yule, 2000). A methodological concern here is related to the use of variable as opposed to person-oriented analytic approaches. However, in research on this topic an unfortunate common tendency is to consider variables as independent entities that take on lives of their own.

Yet another methodological problem is that data describing exposure to war and other potentially traumatizing events are not always adequately treated statistically (see Netland, 2001, for a critical review). In particular the reliability of exposure measures should not be demonstrated by internal consistency, test–retest, or inter-rater correlations based on counts of events, as the occurrence of one event does not increase the probability of another (Netland, 2001); thus, the events cannot be considered as alternative estimates of an underlying construct of exposure (Netland, 2001; Neugebauer, 1984). As Netland (2001) notes, most researchers using factor analytic approaches attempt to find a restricted number of events that best represent the event category, either for scale construction, or for compiling summary measures to analyze relationships between exposure and psychological outcome variables. However, such methods as factor analytic or structural equation causal models are not applicable here, as the constructs measuring exposure variables merely group single indicators together, and should not be considered as latent variables that determine the indicators (Netland, 2001). Rather, categorization of events must be done on a rational basis, or the impact of any particular event should be considered separately, such as in the studies by Macksoud and Aber (1996) and Smith et al. (2002). However, even with this approach, it is difficult to account for all factors that determine individual variability in traumatic response.

**Symptoms associated with trauma**

The first literature on the effects of war on children dates largely from World War II, and is sparse and of variable quality. Not until the 1980s was more systematic enquiry conducted, but during the past two decades a number of relief agencies and researchers alike have noted the marked presence of psychopathology in war-exposed child populations (Ajdukovic & Ajdukovic, 1993; Baker, 1990; Cairns & Dawes, 1996; Garbarino & Kosteln, 1996; Geltman & Stover, 1997; Gibson, 1996; Kocjan-Hercigonja et al., 1996; Punamaki, Quota, & El-Sarraj, 2001; Tomkiewicz, 1997). In addition to other, non-trauma-specific types of psychopathology, posttraumatic stress disorder (PTSD) has increasingly emerged as a common psychiatric diagnosis for individuals who have experienced war-like circumstances (Summerfield, 1996). It is generally accepted now that children represent a highly vulnerable population, for whom levels of symptoms may often be higher than for adults (e.g., Chimienti, Nasr, & Khalifeh, 1989). Recent literature also suggests that childhood trauma can have a lasting impact on child cognitive, moral, and personality development, interpersonal relationships, and coping abilities (e.g., Arroyo & Eth, 1985; Terr, 1983; Pynoos & Nader, 1988; Sack et al., 1993).

Excellent descriptions of clinical symptoms in children exposed to trauma in general (Pfefferbaum 1997; AACAP official action, 1998), and to war trauma in particular (Jensen & Shaw, 1993; Laor & Wolmer, 2002; Yule, 2000, 2002) have been provided in detail elsewhere and will not be reviewed in this article. For the purposes of this paper, we will assume that the reader is generally familiar with the reactions of children and adolescents to traumatic experiences, and will attempt to concentrate on other, more controversial and less well-established issues.

**Assessment of symptoms**

The vast majority of wars take place in developing countries and most refugees originate, as well as seek refuge in, developing countries. However, only a small fraction of research is carried out in these countries, and often studies are conducted when the refugees have settled in a safer environment in developed countries, which differ from their homelands culturally and economically. Thus, clinical symptoms presented by refugees in such contexts may be influenced by discontinuation of exposure, but also by differences in environment, and in many cases by vague ideas about the future. From a public health perspective, assessing symptoms and provid-
The psychosocial aspects of children exposed to war

An initial screening for traumatic symptoms and psychosocial impairment is essential when planning for therapeutic interventions. It is crucially important to carefully separate those in urgent need of interventions from those whose needs are less pressing, as there is some evidence that children who do not experience posttraumatic symptoms may be negatively affected by involvement in therapeutic interventions along with more traumatized children (Laor, 2002; Wolmer, Laor, & Yazgan, 2003).

Prevalence of symptoms

Considering the wide range of potential psychopathological manifestations associated with severe distress, a better understanding of the dynamics of trauma-related symptoms in war-exposed children is crucial. While it is clear that not all children develop psychopathological symptoms, conclusions regarding the magnitude of traumatization reported in recent studies tend to vary, with estimates of the prevalence of symptoms ranging from 22% in Israeli children after scud missile attacks (Laor et al., 1997) and 27% in Lebanese children exposed to shelling (Saigh, 1991), to 48% among Cambodian (Kinzie, Sack, Angell, Manson, & Rath, 1986) and 52% among Central American refugee children (Cervantes, Sallado-de-Snyder, & Padilla, 1989), to 70% among Kuwaiti children after 5 months of military occupation (Nader, Pynoos, Fairbanks, al-Ajeel, & al-Asfour, 1993) and 93.8% in children displaced during the Bosnian war (Goldstein, Wampler, & Wise, 1997). It has also been suggested that once the conflict is over, there is a natural decrease in symptoms of posttraumatic stress (Laor et al., 1997; Punamaki et al., 2001); thus, the number of children needing professional help may diminish markedly with successful promotion of psychosocial healing at family, community and institutional levels (see below).

Duration of symptoms

The issue of duration of symptoms is also quite controversial. Some authors contend that the effects of war experiences are enduring (Elbedour, ten Bensel, & Bastien, 1993; Stein, Comer, Gardner, & Kelleher, 1999). In fact, significant levels of psychological dysfunction and posttraumatic stress have been documented even years after the traumatic events were incurred (e.g., Kinzie et al., 1986; Sack et al., 1993; Terr, 1983). In a study of Iraqi children conducted after the Gulf War, the prevalence of posttraumatic stress symptoms remained fairly stable at 80% over a two-year period (Dyregrov et al., 2002). In another study, 48% of Khmer youths displayed symptoms related to trauma 8 to 12 years later (Kinzie, Sack, Angell, Clarke, & Ben, 1989). Not all studies support this perspective, however. In various studies from different geographic areas the majority of children exposed to war and/or political violence exhibited no signs of clinical disorder (Cairns & Dawes, 1996; Perrin et al., 2000), or their symptoms were fleeting or short lived (Weine et al.,...
stressful events and circumstances may be transient and not indicative of enduring psychopathology (Becker, Weine, Vojvoda, & Mcglasshan, 1999; Sack, Him, & Dickson, 1999; Schwarzwald, Weisenberg, Solomon, & Waysman, 1994; Weine et al., 1995). Laor et al. (2001) reported a significant decrease in severity in most symptom domains five years after exposure to scud missile attack, but severe posttraumatic symptoms were still reported in 8% of children. Ajdukovic and Ajdukovic (1998) found that in Croatian children traumatized by war, PTSD symptoms declined significantly over a 6-months period. Kuterovac-Jagodic (2003) reported that of those Croatian children who had the most severe symptoms during the war, 78.4% reported moderate or higher symptom severity levels 2 1/2 years later, but of children with the less severe symptoms 97.5% reported mild or medium symptom levels.

Differences in the reports of long-term symptom severity may be tentatively explained by a number of factors that differed between the studies, including initial, short-term symptom severity, psychosocial milieu after trauma, and continuity of disruption (e.g., continued displacement at the time of follow up, conflicts in the family, etc.) (e.g., Jones & Kafetsios, 2002; Kuterovac-Jagodic, 2003). Child personality characteristics, such as emotional and aggressive coping and external locus of control, and age of the child have also been found highly predictive of long-term psychological outcomes (Kuterovac-Jagodic, 2003). In general, young children are assumed to be more vulnerable than adolescents due to their less developed cognitive capacities for remembering, processing, and coping with trauma (Fivush, 1998; Schneider, 2000). On the other hand, there is also a strong belief that the youngest children experience some protection from the severity of trauma because they do not understand the full measure of its negative consequences (Punamaki, 2002). Many studies tend to agree about the greater vulnerability of children between 5 and 9 years (e.g., Garbarino & Kosteln, 1996; Kuterovac-Jagodic, 2003), whose ability to be aware of and to process real events is expanding, but who still lack consolidated identities and higher order defense mechanisms. Finally, the degree of available social support appears to diminish the psychological impact of war over time (Kuterovac-Jagodic, 2003).

Since World War I it has been reported that for adults and children habituation and acclimatization may play an important role in individual reactions to war stress (Zimmern, 1941; Vernon, 1941; Ziv & Israeli, 1973), leading to some degree of resilience to chronic violence exposure (Cairns, 1996; Punamaki, 1996). In the context of continuous war activities stressful events and circumstances may be perceived as normal, everyday reality to which the child may become adjusted, particularly when that is the only context that has been experienced (Jensen & Shaw, 1993). It has been suggested that moderate degrees of exposure to war stress can result in ‘self-protective, adaptive cognitive styles’ that ensure more effective functioning, especially if such exposure does not involve threats to the child or to the immediate family (Jensen & Shaw, 1993); this, however, does not imply a complete absence of psychological distress (Miller, 1996).

To a large extent, the degree of distress experienced by children and youth may be related to their understanding of the psychological meaning that violence carries for them and their families, which in turn influences their ability to cope (Cairns & Dawes, 1996, p.131; Punamaki, 1996). However, considering that most research on the duration of symptoms has been conducted with children after relocation to safer countries, or discontinuation of war activities, future work is needed to address the issue of chronic exposure to war trauma. However, even in circumstances in which most children do not experience long-term effects, and despite a continuous decrease in symptom severity, the proportion of children who do develop psychopathology and impairment is more than significant, and should always be considered in planning relief work and research with traumatized populations.

Psychosocial impairment caused by symptoms

It has been suggested that population-based surveys, frequently used to efficiently obtain information about the symptom levels of a large number of children, may overestimate the prevalence of PTSD (Summerfield, 1996). Symptoms of distress represent natural reactions to trauma; thus, studies of war-affected children face the challenging task of differentiating pathological from normal reactions, with respect to emotional responses, and changes in behavior and activities that represent either realistic adaptations or disorder-related impairment. Some critics even consider PTSD as an inappropriate medicalization of human suffering caused by political circumstances (e.g., Bracken, Giller, & Summerfield, 1995).

Most self-report measures, as well as most studies conducted on child populations exposed to war, have not considered the degree of psychosocial impairment associated with symptoms, an essential diagnostic feature of PTSD that also has considerable meaning for planning intervention efforts (Green, 1982). Of the studies that have measured levels of impairment, results so far have been controversial, if not surprising. Summerfield and Toser (1991), in a study of war-displaced Nicaraguans, noted that for many, despite evident symptomatology, impairment in familial, occupational, and social functioning was often not significant. Sack et al. (1993), in a study of
occurs (Jones & Kafetsios, 2002). The traumatic experience and the context in which it occurs will be perceived as distressing is greatly impaired of psychosocial functioning. Hence, survivors as compared to controls, with concomitant impairments of child well-being, in almost a quarter of the participants self-reported levels of symptoms provided misleading information about the well-being of the child. However, many studies suggest otherwise. Studies of child survivors of the Holocaust, for example (for a review see Cohen, Brom, & Dasberg, 2001a), indicated higher levels of posttraumatic and psychosocial symptoms among child survivors as compared to controls, with concomitant impairment of psychosocial functioning. Hence, those studies would suggest that some long-term problems can be contained for years (at a cost), but the job. Kinzie et al. (1986) found that for young Cambodian refugee children, in spite of the high prevalence of psychiatric symptoms, the overall lack of social impairment was ‘remarkable’. Jones and Kafetsios (2002), in the study of adolescents after the Bosnian conflict, similarly note that although levels of symptoms correlated reasonably well with the measures of child well-being, in almost a quarter of the participants self-reported levels of symptoms provided misleading information about the well-being of the child. However, many studies suggest otherwise. Studies of child survivors of the Holocaust, for example (for a review see Cohen, Brom, & Dasberg, 2001a), indicated higher levels of posttraumatic and psychosocial symptoms among child survivors as compared to controls, with concomitant impairment of psychosocial functioning. Hence, those studies would suggest that some long-term problems can be contained for years (at a cost), but may emerge as people retire and fall ill (Cohen et al., 2001a). Finally, an increasing amount of research suggests that whether or not psychological symptoms will be perceived as distressing is greatly influenced by the individual interpretations of the traumatic experience and the context in which it occurs (Jones & Kafetsios, 2002).

Additional diagnostic considerations

The nature of psychopathological symptoms resulting from childhood trauma exposure has been a topic of heated debate, with some proposing the creation of broader, contextualized diagnostic nominations. Laor et al. (2002), for example, have maintained that the assessment of psychopathology in children following a disaster, including war-related experiences, requires a complementary evaluation of symptoms – not only of posttraumatic stress – but also of dissociation and traumatic grief, because different components of grief and dissociation (perceptual distortions, body-self distortions, irritability, and guilt and anhedonia) are associated with different risk factors. The fact that commonly used scales for psychopathology often fail to distinguish between grief and posttraumatic stress (Mcnally, 1996), and grief and depression (Jones & Kafetsios, 2002), makes a separate assessment of grief reactions even more important. Broadening diagnostic considerations to account for cultural variability in handling trauma has also been proposed. For example, the term cultural bereavement has been suggested to refine and complement psychiatric diagnosis associated with trauma (Eisenbruch, 1991). In essence, cultural bereavement goes farther than diagnosis by incorporating experiences of guilt, painful memories, and morbid thoughts that cloud daily life as the result of the loss of social structure, cultural values, and self-identity (Eisenbruch, 1991). The concept of cultural bereavement also takes into account specific individualized or indigenous methods for coping with trauma, and when less incapacitating, can be normal and even a constructive sign of rehabilitation from devastating traumatic experiences. Thus, in assessing international child populations exposed to traumatic events, recognition of the cultural manifestations of war-related distress and of the culturally specific strategies for coping is critical.

Cultural sensitivity in assessment and treatment

Two major ideologies have emerged concerning the role of culture in assessing and treating war-affected individuals. Considering the lack of good studies on cultural aspects of psychopathology in children and adolescents, some of the references that follow come from studies on adults. Some studies maintain that signs of emotional distress are expressed similarly by children of different cultures and that PTSD resulting from war trauma surmounts the barriers of culture and language (Sack, Seeley, & Clarke, 1997). Such proponents have demonstrated the cross-cultural applicability of Western therapeutic programs in non-Western cultures (Goenjian et al., 1997) and maintain that Western therapy regimes can offer valid modes of treatment in supporting psychosocial programs and services for diverse populations of children affected by war (Lowry, 2000).

The alternate view maintains that there is a broader range of posttraumatic responses to war situations, and notes the limitations of present models and the need for expansion or revision (Bracken et al., 1995; Dawes, 2000; Krener & Sabin, 1985; Rousseau, Drapeau, & Platt, 1999). Kleinman and Kleinman (1991) note that cultural factors influence the expression of PTSD symptoms, and question whether any particular symptoms are predictive of the full syndrome cross-culturally. Dawes (2000) notes that distress cannot be homogenized to adequately address local forms of response and that Western mental health workers risk imposing culturally alien diagnostic assumptions, some of which break down when applied cross-culturally (Krener & Sabin, 1985). Furthermore, Rosner (2003) argued that ‘even if posttraumatic stress can be diagnosed in many cultures over the world, that does not mean that it is the most appropriate of all imaginable categories in each of those cultures’ (p. 3). Kirmayer and Young (1999) have noted that dysfunctional responses can be distinguished from normal ones and defined in terms of the social or inherently cultural context. Indeed, as emphasized by Bracken et al. (1995), the way individuals deal with suffering is determined by the social, cultural and political aspects of their unique situations, and mental health professionals with different cultural backgrounds must help local caregivers work from within their...
idioms of distress and trauma (Laor & Wolmer, 2002).

In order to provide culturally sensitive assessment and treatment, it is essential to understand cultural practices and to have local knowledge of the community (Schwab-Stone, Ruchkin, Vermeiren, & Leckman, 2001). Delivery of mental health interventions in non-Western settings needs to incorporate prevailing cultural norms, including spiritual or religious involvement, basic ontological beliefs, and related issues (e.g., personhood and social connectedness, community, and illness) (Klingman, 2002a). In cross-cultural consultation, important aspects of communication include the use of interpreters who are proficient in explaining linguistic nuances during the consultation (Schwab-Stone et al., 2001) and also are acceptable to the child and family (Yule, 2002). Local needs and resources, and the possibility of culture-specific ways of understanding, expressing and healing trauma should be recognized (Dawes, 2000). For example, Kinzie et al. (1986) reported that for Khmer youths, traditional values shaped a coping style characterized by avoidance and the tendency to suppress feelings. In some cultures adults may require children to be well behaved and emotionally constrained (Laor & Wolmer, 2002), which potentially may complicate the process of identifying symptomatic youth. In some settings, individuals may preferentially access help from local healers (e.g., Neugebauer, 2002), whose help may be especially valuable and valued because they know local realities, hold shared beliefs and can utilize those much more effectively than newcomers (Schwab-Stone et al., 2001).

Thus, it may be that optimal approaches to understanding and treating war-exposed children draw both on principles of cultural specificity, and cross-cultural universality. Recognition of cultural differences in social support systems is important, as they carry direct implications for intervention strategies (Schwab-Stone et al., 2001), but biology and culture are co-constitutive rather than separate and additive (Dawes, 2000).

Additional considerations in planning the interventions

Ideology and hatred

Children of all ages attempt to understand the confusing events and experiences of war, but the strategies used differ by developmental level. A child’s perception of war at an early age tends to be based largely on the perceptions of the attitudes of adults in the social environment, as well as on messages received through the radio, movies, and other mass media (Bender & Frosch, 1942; Jensen & Shaw, 1993). A study of Soviet children in wartime (c.f. Bender & Frosch, 1942) similarly suggested that ‘children take their cues from those around them’, and that ‘children absorb and reflect the attitudes of those who are closest to them’. It has been emphasized that even if parents try, it is impossible to deceive children and keep information from them, as they inevitably will be exposed to war-related news and programs. Parents ‘are not able to protect their children from life but they can help them face it’, as uncertainty can often stimulate more fears and fantasies than the facts themselves (Beverly, 1942).

Communication about war-related matters by family members, community and mass media, can provide a sense of security and support, or cause additional distress. Excessive politicizing can have major impact on a child’s political identity, which is often premature. Punamaki (2002) noted that ‘young people are interested in ideological issues and are constructing their worldviews. A secure life history and a safe environment provide them with an opportunity to try different roles, learn repertoires of emotional expression and train sophisticated problem solving skills. On the contrary, emergency needs in wartime create an atmosphere where complex moral dilemmas are simplified and people are split as good or bad’, which leads children to identify more closely with their important others. Ziv, Kruglanski and Shulman (1974), for example, reported that children exposed to shelling were more strongly identified with the community, and had increased feelings of patriotism compared to non-exposed children.

War can produce conflict in the minds of youth by forcing positions or attitudes on them that contradict previously taught attitudes and principles (Beverly, 1942). If children have been taught that war is wrong, they are then expected to reject this teaching, accept war and glorify the war heroes. However, one resolution for this confusion is to depict the enemy as unfair, dishonest, barbaric, merciless, and different from ‘us’ (see Sternberg, 2003). It is often claimed that the enemy started the war (or that ‘we’ did not have any choice but to start the war to reinstate justice) and that the home country is struggling for the right cause. The ideology involved in any military conflict is often used as a tool for reaching a purpose, and for reassuring fellow citizens, including children, of the fairness of struggle and the ‘right’ meaning of it. During WWII, for example, Russian sources strongly emphasized that in addition to morale-building efforts, there were also ‘direct appeals to the children to get busy, to realize that it is their war and that their efforts to bring it to a victorious and speedy end are just as necessary as those of their elders’ (c.f. Bender & Frosch, 1942). Another example of a ‘reasonable’ explanation of war to children was described by Bender and Frosch (1942), who referred to the work of Ziemer (1941) which described educational approaches used with young children in Nazi Germany. Dying in battle for Hitler was glorified, while the desire for peace was portrayed as a ‘decadent’ wish. Recent examples of
such ‘educational’ approaches come from the heavily politicized teachings of some Palestinian and Sri-Lankan liberation movements that engage children as potential suicide bombers, emphasizing glory of death and the joyful afterlife that awaits those who sacrifice their lives for the ‘right cause’ (e.g., Somasundaram, 2002).

Punamaki and colleagues, based on their studies of Palestinian children (Punamaki, 2002; Punamaki & Puhakka, 1997; Punamaki et al., 2001; Qouta, Punamaki, & El Sarraj, 1995), have suggested that the active involvement of children in political confrontation in times of political violence of low intensity may have a protective effect for child mental health. What their findings actually suggest is that although the subjective preferences for active fighting in times of conflict may be associated with lower levels of psychopathology after the intensity of conflict reduces (Punamaki et al., 2001), actual political violence may have a ‘sobering’ effect on children’s attitudes. Indeed during the Intifada, children generally reported lower preferences for active fighting than before it, and older children who experienced several stressful events tended to report lower preferences for active fighting than those who did not (Punamaki & Puhakka, 1997). Although younger children (~10–11 years old) reported higher preferences for active fighting in relation to the number of events experienced (Punamaki & Puhakka, 1997), this may merely reflect fantasies in response to trauma, rather than active involvement, especially considering their age. These findings should be considered with an additional caveat, since only attitudes to active fighting, not the actual behaviors of the children were assessed. It is not known whether these children were actually involved in active fighting, as opposed to simply reporting on preferences for more active behaviors; thus, definitive conclusions about the protective role of active political involvement are premature.

**Child combatants**

The Optional Protocol to the Convention on the Rights of the Child (adopted by UN General Assembly, 2000) on the involvement of children in armed conflict defines 18 years as the minimum age for direct participation in hostilities, for compulsory recruitment and for any recruitment by non-governmental armed groups. Furthermore, the 1998 Statute of the International Criminal Court has defined as a war crime the conscription or enlistment of children under 15 years of age into the armed forces or their use in combat (Pearn, 2003). In spite of that, ‘the increasingly widespread exploitation of children as soldiers is one of the most vicious characteristics of recent armed conflicts’ (Machel, 2001, p. 7). It has been estimated (Brett & McCallin, 1998, p. 9) that 300,000 children, sometimes as young as six years old, actively participate in ongoing military conflicts at any one time. Children join the armed groups after being forced by a wide range of economic, cultural, social, and political pressures (Machel, 2001; McConnan & Uppard, 2001). In many cases joining an armed group may be their only option, because their caregivers were killed or conscripted, whereas army services provide a means to get food and earn some money for themselves and surviving relatives (Boothby & Knudsen, 2000; Somasundaram, 2002). Children who lost one or both parents during invasion or bombing frequently express the desire of revenge (Despert, 1942). Adolescents can also be attracted by specific ideologies, and fight for social and political causes, for religious expression, self-determination, or for national liberation (Machel, 2001). During WWII, for example, several sources of information from the USSR described anecdotes about young boys who spontaneously entered the ranks of guerrilla fighters and participated in offensive and defensive plans (c.f. Despert, 1942).

Child soldiers are used as combatants, messengers, porters, and cooks; they care for the wounded, scout for mines, watch at dangerous checkpoints, and are used for sexual services (Boothby & Knudsen, 2000; Machel, 2001). ‘Commanders typically view child soldiers as more expendable than adults, so they receive less training and must undertake the most dangerous tasks’ (Boothby & Knudsen, 2000, p. 63).

Indoctrination usually involves several phases, during which attempts are made to harden children emotionally by punishing those who offer help, or display feelings for others subjected to abuse (Boothby & Knudsen, 2000). Children are often beaten up and continuously exposed to the scenes of violence, so that they do not question the authority of the adults in the group; sometimes they are even forced to kill captives or their own family members (Boothby & Knudsen, 2000).

To date, no study has assessed the longitudinal outcomes of children who partake in mass violence. In addition to the longer term sequelae of direct involvement in violence, child soldiers are at greater risk for being displaced than other war-exposed children (Alfredson, 2002; McConnan & Uppard, 2001); hence, additional steps often need to be taken to return them to their home communities. Furthermore, it is often difficult to bring these children back to their communities because of strong negative feelings about their military involvement. And for these children, military activity is often the only thing they have learned to do well. In addition, most governments do not take responsibility for integrating former recruits into society once they have been discharged (Alfredson, 2002). For child soldiers, return to community life is at best a slow process of healing and forgiveness, requiring a network of support from parents, teachers, religious and other community leaders, and community mediation (Machel, 2001). Readers interested in learning more...

Some evidence suggests that to some extent children’s social and moral concepts may be resilient, with family and religious bonds remaining strong in the face of violence, and children maintaining an essential distinction between violence for just and unjust causes (Boothby & Knudsen, 2000). However, it has also been noted that children’s subsequent moral responsiveness is largely determined by the length of time they spent in the armed group (Boothby & Knudsen, 2000). In Mozambique, for example, children who stayed less than six months, after their liberation initially displayed aggressive behavior and distrust of adults, but these reactions quickly subsided and children defined themselves as victims rather than as members of the military group, with common reactions of posttraumatic stress and remorse (Boothby & Knudsen, 2000). At the same time, children who were in the camps a year or more had substantially changed self-concepts, which became solidly intertwined with those of their captors. They continued to use violence as the principal means of exerting social control and influence (Boothby & Knudsen, 2000), or even joined another armed group in a different country, like mercenaries (Machel, 2001).

**Non-specific psychosocial interventions**

Non-specific interventions address issues such as the discontinuation of existing stresses, including elimination of ongoing conflicts and provision of safe areas and shelters; restoration or reactivation of significant ameliorative and protective factors, including reunification, active engagement and coordination of families, education, and community efforts for psychosocial healing.

**Elimination and displacement**

To begin the healing process, discontinuation of existing stressors is of immediate importance. When continuous extreme adversities (e.g., losing family members or close friends) combine with disaster experiences, children’s posttraumatic reactions often intensify and recovery is delayed (Laor & Wolmer, 2002; Husain et al., 1998; Pynoos et al., 1993).

Elimination of war-time stressors for children usually involves one of three possibilities. The first is cessation of the existing conflict between dueling factions and establishment of a safe and civil atmosphere. Although this represents the ideal, it is often difficult, or impossible to achieve, especially in a short time, as peace processes can be postponed indefinitely. It has been shown that chronic trauma without the possibility of a foreseeable cessation in violence exposure and stress has a significant impact on child mental health that is different from the acute impact of trauma (Cairns & Dawes, 1996). In the context of continuous war activities, stressful events and circumstances can be perceived as normal everyday reality, to which the child may become adjusted, especially when for some it may be the only social environment they have experienced (Jensen & Shaw, 1993). In particular, some studies have suggested that such prolonged exposure may result in an increased threshold for traumatic response, with decreased perception of danger (Punamaki et al., 2001). Second and third alternatives involve displacing children (and their families) to safer areas, either internal displacement sites within the country of origin or external displacements to alien territories or countries, until civility in the home community/country is restored. Neither of these alternatives is ideal, but they often represent the grim necessity. In addition to the war-related experiences, displacement itself may compound the level of distress, as children develop intimate connections with their environments, including not only attachment to individuals, but also attachment to places (Fullilove, 1996). An additional risk associated with displacement involves a possibility of military recruitment by armed groups. Thus, refugee camps and settlements should be located at a distance from the area of conflict, and security or staff presence should be strengthened where children may be vulnerable to recruitment efforts (i.e., escape routes, reception centers, camps or settlements) (Alfredson, 2002).

An extensive literature on the effects of displacement originating from the studies of evacuee children in Britain during WWII (Burt, 1941; Henshaw, 1940; Isaacs, Brown, & Thouless, 1941; Zimmern, 1941) suggests that displacement tends to be much more favorably perceived by older children (generally, 12 years and older). Younger children, however, often react with separation anxiety, and other internalizing and externalizing symptoms (e.g., Henshaw & Howarth, 1941). Several authors (Bowley, 1940; Burt, 1941) have emphasized that preschool children in particular should not be separated from their mothers. Even older children do better when accompanied by other familiar adults, siblings, or by a teacher. Young children tend to perceive the dangers of the situation through the eyes of their important adults, and thus, subjective distress experienced and expressed by adults tends to produce distress in children (Bowley, 1940; Solomon, 1942). This finding is also supported by more recent research that demonstrates an intimate link between the levels of stress in mother and child (Laor et al., 2002), and an association between maternal mental health and child adjustment following war (Smith, Perrin, Yule, & Rabe-Hesketh, 2001), especially for children under the age of 4 years (Laor & Wolmer, 2002).

In spite of the possible advantages of displacement, such as stopping the exposure to potentially traumatic events, the impact of displacement per se
on children’s mental health remains a controversial issue. Several British studies have suggested that the psychological effects of evacuation could be more detrimental than those of bombing, especially when evacuation is unplanned (e.g., Despert, 1942). In addition, studies by Laor et al. (2001) and Fayyad (2002) suggest that the number and even the fact of displacement itself can add to the negative impact of poor family functioning in predicting the severity of symptoms in children. However, other studies have found that most children are able to adjust successfully to evacuation and that increases in psychopathology were less severe than many had anticipated (e.g., Jersild & Meigs, 1943). To a large degree, the outcome and the process of evacuation depend on whether it has been voluntary or compulsory, with evacuation that is self-imposed and unhurried being relatively less traumatic (Brander, 1941, cf. Despert, 1942). The effects of displacement on mental health are also described in more detail by Fullilove (1996).

With growing awareness of the suffering of children and families displaced during war, the United Nations (UN) and other aid agencies have developed and published guides for relief workers, planners and other specialists, that describe in detail the necessary steps to be taken in order to provide adequate protection for refugees (see, for example UNHCR guidelines on protection and care of refugee children (UNHCR, 1994)).

While it is hoped that voluntary repatriation to the area of origin eventually becomes possible, if resettlement is not considered safe, the least favorable option becomes temporary local integration in a granted country of asylum. The successful outcome of this experience is related to factors such as degree of safety and security in the new place, whether a refugee camp (Geissler, 1999) or a community setting in an industrialized country (Anderson, 2001). Naturally, when children are forced from their home environments, safety and security within the new setting is of paramount importance (Paul, 1999); it has been reported that some refugee settings expose children to further levels of violence, alcohol abuse, family quarrels, sexual assault, and beatings (Machel, 1996, 2001).

**Restoration and resettlement**

Once traumatic events have stopped or been eliminated, the process of restoration begins. Non-psychiatric interventions, such as provision of basic needs, food, shelter and clothing, help provide the stability required to ascertain the numbers of youth needing specialized psychiatric care. First, basic needs and a sustainable sanitary environment must be restored. This includes the provision of primary health care, efforts to halt the spread of communicable diseases, access to clean water and food supplies, adequate nutrition, shelter and sanitation. Restoration should also involve restarting food production, schooling, and religious activities. While the ultimate goal is sustainability, if for some time local production is not possible, adequate food and other relief programs will be required until sustainability can be achieved. Provision of basic needs has to be integrated with psychosocial assistance and careful clinical evaluation, as the impact of traumatic stress on physical health is a neglected topic (McFarlane & Yehuda, 1996). For the youngest children, especially those under three, many health problems are linked to malnutrition (Machel, 1996, 2001). Long-term malnutrition and protein-energy undernutrition result in cognitive and social-emotional impairment, with little improvement upon nutritional recovery (Sternberg & Grigorenko, 1997, p. 27). The need for a holistic view of health is also illustrated in article 39 of the Convention of the Rights of the Child, where it is also noted that states are required to take measures to promote children’s physical and psychological recovery and reintegration.

With respect to reintegration of child combatants, Machel (2001) noted three primary aspects to rebuilding societies ravaged by war. These include disarmament (the collection of weapons within conflict zones and their safe storage or disposal), demobilization (the formal registration and release of combatants from duty, providing assistance to help them meet immediate needs and transport back to their home communities), and reintegration (the process of helping former combatants return to civilian life and readjust socially and economically). Demobilizing children requires their immediate separation from adult soldiers, with subsequent escorted transportation from the conflict zones within 48 hours to reduce the risk of re-mobilization (Machel, 2001). Special efforts should be made to ensure reintegration of child soldiers in their communities. Cultural beliefs and attitudes can make reunification particularly difficult for girl soldiers who have been raped or sexually abused (Machel, 2001). Readers interested in practical guidelines to the problem of child soldiers should consult McConnan and Uppard (2001).

Beyond basic needs, restoration involves reconnection to tradition, culture, nature, and spiritual practices that have given life meaning and value before the traumatic disruption (Lowry, 2000). Restoration also includes the re-establishment of trust, self-esteem, attachment and social networks, and the regeneration of hope and belief in the future (Jareg, 1995). Rebuilding and re-establishing damaged cultural and social institutions is a challenging and time-consuming task that requires interest, attention and initiative. Skill is necessary to help re-establish cultural components with durable and permanent solutions that do not foster feelings of powerlessness or dependence (Lowry, 2000). Furthermore, active involvement of children and adolescents in the restoration process can foster ideological commitment
that may be beneficial for mental health (Punamaki, 1996). Early studies (e.g., Beverly, 1942) have similarly emphasized the importance of youth involvement and noted that, during the war, youth should feel that there is something they can do and do well, and to know that there is a place in society, however seemingly disrupted, for them.

**Re-establishing the psychosocial network**

The impact of war on child mental health is determined by psychological and social effects, including altered relationships due to death, separation, estrangement and other losses, family and community breakdown, damage to social values and customary practices, and the destruction of social facilities and services. These factors mutually interact and affect a child’s perceptions and understanding, as well as lead to specific symptom expression. To reconstitute psychosocial health and stability, children need caring adults, security, education, and opportunities to exercise and play. Due to increasing awareness of these aspects of the recovery process, many NGOs have implemented programs of psychosocial support that specifically address the needs of families and children (Dybdahl, 2001a, b; Dyregrov et al., 2000; Woodside, Barbara, & Benner, 1999). Some of these programs focus on educating and supporting parents and teachers so that they in turn can support the children, whereas other programs involve direct work with children to help them process their traumatic memories through drawings, play or talking about what has happened (Dybdahl, 2001a). Although restoration initiatives have utilized both population-based and individualized approaches, they may necessarily involve simple and direct approaches due to limited resources and the large numbers of affected individuals. These may include, for example, training programs and initiatives aimed at educating community leaders to help in the psychosocial healing process. Individualized interventions are usually introduced after population-based ones because of emergency conditions and the sheer numbers in need.

**Family.** Parents usually serve as the major source of expertise for the modeling of cultural and subcultural expressions and rules regarding emotions (Gerull & Rapee, 2002; Von Salisch, 2001). When children express their fears (Rime, Dozier, Vandenplas, & Declercq, 1996), parents provide examples of culture-specific approaches for dealing with negative emotions (Laor & Wolmer, 2002; Saarni & Weber, 1999; Schwab-Stone et al., 2001), and by being responsive to expressions of anger, frustration or distress, they can help mediate the child’s management of stress and foster mastery of threatening or frustrating situations (Cassidy, 1994).

In fact, greater severity of symptoms in children is associated with having a mother with poor psycho-

logical functioning and living in a family with inadequate cohesion (Laor et al., 2001; Smith et al., 2001). Parents or other caregivers who suffer often have difficulties interacting with their children and may become less sensitive, less tolerant and less able to feel and express love for their children; they may also be less able to maintain normal rules and boundaries for their children (c.f. Dybdahl, 2001a). Thus, important goals of family interventions are the reduction of family distress and the promotion of strategies to support parental calm and stability, which in turn serves to promote child well-being (Machel, 1996).

It should be noted, however, that although maternal distress has an important impact on child reactions, having a caring and protective mother is not a panacea, and ‘closeness to a responsible mother does not protect preschool children from the traumatic impact of war and persecution’ (Almquist & Brandell-Forsberg, 1995, p. 225), as mothers cannot buffer their children from stress, a view that has ‘blandly been accepted as a truism’ (Cairns & Dawes, 1996, p. 131). Thus, planning for interventions requires a sober approach that realistically assesses available resources and does not support unjustified hopes and expectations.

It is generally in the best interest of children to remain in a family care setting, both for emotional reasons and because separated children are more prone to exploitation and other risks (Bruce, 2001). Children who have lost their families or been rejected by their communities may need a transitional period of alternative care, such as peer groups or foster family (Machel, 2001). Although orphanages should be avoided, sometimes realities dictate the necessity of organizing such settings (e.g., centers for unaccompanied minors in Rwanda, organized by UNICEF), which also tend to be less expensive – an important factor for postwar societies (Neugebauer, 2002). However, foster placements may be a better alternative until biological families, or more permanent solutions, can be found (Bruce, 2001), and if these arrangements are well integrated into communities they can be more successful than institutional care (Machel, 2001). When such decisions are made, siblings should be placed together, and placements should if possible match children with families of similar cultural background (Bowley, 1940; Burt, 1941; Kinzie et al., 1986; Williams & Westermeyer, 1983).

**Education.** It has been widely recognized that education is an inalienable right, which all children, including those caught in natural and human-made emergencies, should be able to access and that it is central to human and national development (Pigozzi, 1999). In emergency situations educational activities must be established or restored as soon as possible, and where education systems have been rendered non-functional, the rebuilding of the system provides
an opportunity for transforming education so that it meets the needs of the population (c.f. Pigozzi, 1999). Education can also serve as a mechanism for contributing to the prevention of emergencies. In many countries it is necessary to have an emergency preparedness plan and it is essential to know what to do to support education in the event of an emergency (Laor & Wolmer, 2002; Pigozzi, 1999; for an excellent review of schools and war see also Klingman, 2002b).

Restoring structured education helps to restore the normalization, stability, and continuity of children’s lives and importantly promotes resumption of the social role of student (Kos & Derviskadic-Jovanovic, 1998), thus fostering community cohesion (Dawes, 2000). Classroom settings provide predictable routines, clear expectations, consistent rules, and immediate feedback for children with questions or concerns (Laor & Wolmer, 2002; Yule, 2002), as well as social interaction and friendships, with possibilities for reciprocal affection, attachment, and emotional security (Laor & Wolmer, 2002; Parker, Rubin, Price, & DerRosier, 1998). At school, children also have working tasks, functions, and responsibilities. Success in school enhances self-esteem and improves coping abilities (Kos & Derviskadic-Jovanovic, 1998), while countering tendencies toward isolation and withdrawal (Laor & Wolmer, 2002; Vernberg, Silverman, La Greca, & Prinstein, 1996). In school-based interventions, the initial goal is to create an emotionally safe and friendly environment while incorporating mental health interventions (Kos & Derviskadic-Jovanovic, 1998). In addition, schools and other public services can help in monitoring children’s adjustment and level of coping, and can facilitate the provision of professional help when it is needed (Yule, 2002).

Supportive relationships with teachers are important predictors of the psychological well-being of traumatized children (Laor & Wolmer, 2002; Udwin, Boyle, Yule, Bolton, & O’Ryan, 2000; Vernberg et al., 1996; Rutter, 2000). In a manual published by UNICEF, Macksoud (1993) highlights the crucial role teachers can play in creating a therapeutic environment. She emphasizes that teachers have the difficult task of understanding and supporting their students emotionally, while continuing ongoing routines and daily and extracurricular activities, such as music, sports and arts. These, when available, can serve as useful outlets for dealing with stress (Macksoud, 1993). Teachers can also facilitate discussions about the war, taking the developmental level of their students into account. Furthermore, they have opportunities to reinforce coping skills, correct rumors, identify suffering children, and prepare students for future experiences (Laor & Wolmer, 2002). In such situations, it is often necessary to teach basic recognition and therapeutic skills to both teachers and parents, since they may be the first to see trauma symptoms develop (Macksoud, 1993). Understanding and early recognition of symptoms and psychosocial impairment is a first and essential step in ensuring optimal recovery for children.

It is often the case that former combatants have fallen behind in their education. When placed at their educational level, they may end up in classes with younger children, which can be humiliating, leading them to avoid and withdraw from school (Machel, 2001). Also, teachers and parents may not be supportive of their potential influence on other children. Hence, the development of special classes for former child soldiers has been proposed as a first step in a process that should lead ultimately to reintegration into regular schools (Machel, 2001).

Several NGOs have implemented the practice of ‘training of trainers’, which involves a short-term (usually weeks to a few months) training of community members and teachers in basic skills of psychosocial intervention and alleviation of distress. These community members subsequently provide additional outreach capacity not covered by other interventions (Laor & Wolmer, 2002; Miller & Billings, 1994). Although the effectiveness of such measures has not been definitively demonstrated, some authors have argued that in a situation of acute shortage of mental health professionals, additional support provided by non-professional community members and teachers can be very helpful for community outreach (Laor & Wolmer, 2002; Neugebauer, 2002), and the training process can help reduce ambivalence or resistance to foreign assistance from local relief workers (Laor & Wolmer, 2002). These helpers, however, need ready access to professional feedback and consultation, and the planning and expectations about their work should be gauged in light of the amount of training they obtain.

Among specific educational programs, some NGOs (e.g., UNESCO, United Nations Children’s Fund) have proposed and initiated school-based programs addressing grief and psychosocial stress. There is no single ‘right’ way to approach these conditions. Many societies, communities, and families have developed ways that they consider suitable for dealing with loss and stress; these need to be identified and utilized in helping children, parents, and teachers come to terms with their situations and experiences and resume their regular daily activities to the extent possible (Pigozzi, 1999). It has also been suggested that school-based educational programs should teach peace education and reconciliation, in order to promote the culture of peace in children (Schwebel, 2001). Peace education programs aim to provide youth with ‘the skills they need to resolve their conflicts peacefully, to cope with the stress of violent ethnic conflicts, and to prepare for a less violent future by providing them with psycho-social support and educational skills’ (Aguilar & Retamal, 1998, p. 43). It has been suggested that these skills should form part of any basic education curriculum (Pigozzi,
1999). Such programs have been developed with different degrees of success in several crisis countries, including, among other places, Burundi, Liberia, and Somalia (see also Aguilar & Retamal (1998)). However, no systematic evaluation has been carried out in order to assess the relevance of these experiences and the impact of their approaches; hence further research and reflection are needed.

**Coordination of psychosocial efforts**

Multi-level intervention initiatives addressing individual, family, and community issues are most effective in supporting recovery and renormalization (Garmezy, Maston, & Tellegen, 1984; Zimmerman & Arunkumar, 1994; see also Dawes, 2000). On a macro-scale, the goal is to institute cohesive, well-functioning, supportive social institutions (Dawes, 2000). Supportive communities for at-risk adolescents can help in the process of reversing traumatized identity and in the reconstruction of social tissue (Barudy, 1989). Hjern and Angel (2000) have reported that refugee children showed significant mental health problems during the first 18 months after exile, but significant improvement was evident in a follow-up study six years later. It was suggested that this improvement may have been related to a positive change in environment, since the refugees had spent the first 18 months in transitory housing complexes, while at follow-up the social and living situations of the families were much improved. Hence, converging evidence supports the role of community mediation and participation (Dawes, 2000) as key elements of community level intervention programs.

**Effectiveness of non-specific interventions**

The literature on the effectiveness of non-specific psychosocial interventions for children is sparse. However, there is preliminary evidence that some psychosocial intervention programs have a positive effect on child mental health. Dybdahl (2001a, b), for example, reported a moderate positive effect on mental health of mothers and children as an outcome of an early childhood care and education program implemented in Bosnia and Herzegovina. The program promoted parental involvement, support and education, and focused specifically on the mother–child interaction, trying to reinforce the existing positive communication and interaction patterns to enrich the child’s environment (Dybdahl, 2001a, b). To our knowledge, this is also the only published study that used random assignment of individuals (as mother–child units) to intervention groups (psychosocial support and basic medical care versus basic medical care only). A detailed description of the program is provided elsewhere (Dybdahl, 2001a), but in brief, the structure of the program consisted of groups of children, mothers, group leaders and a supervisor, who also had access to senior supervisors and support. Prior to intervention, the supervisor and group leaders received several weeks of training about the background, content and working methods according to a manual developed specifically for the program. The intervention groups involved two-hour semi-structured meetings conducted once per week for a period of five months, with each meeting dedicated to education and discussions of specific topics, such as typical traumatic stress reactions and the importance of recognizing distress and helping children rather than punishing them for their problems (e.g., repetitive play or bedwetting). The mothers were also encouraged to share their experiences about this topic and discussed the suggestions proposed by the group leader. The effectiveness of family support programs suggests that while maternal distress plays a negative role through its impact on the child’s well-being (Laor et al., 2001; Smith et al., 2001), parental support to children has a significant protective and healing effect, which could potentially be enhanced through further specific interventions.

Gupta (2000) reported a significant reduction in psychopathological symptoms in children after a non-specific unstructured school-based psychosocial intervention conducted at four displacement camps in Sierra Leone. Children were randomly selected from a larger population of children, and were assessed pre- and post-intervention. The intervention was conducted by teachers, who received 6 hours of training, and included basic literacy and numeracy skills teaching, combined with a trauma healing and expression module, as well as a recreational kit. This module attempted to alleviate children’s traumatic stress symptoms by encouraging them to participate in various culturally appropriate structured activities, such as story-telling, drawing, writing, talking, drama, dance, music and athletics.

Chase et al. (1999) described an innovative therapeutic program in Sri-Lanka called Butterfly Garden in which children attended weekly a six- to nine-month program run after school and on weekends to develop creativity, imagination, and confidence through the visual and performing arts. The site was established as a ‘peace zone’, to provide children affected by armed conflict with a sanctuary where they could heal through engaging their creativity in play, artwork, and earthwork. In its therapeutic goals, the Butterfly Garden was supposed to counter some of the effects of psychological trauma with fearlessness (as an expression of psychological comfort, well-being) and a sense of dignity, personhood, and hope. Unfortunately, no detailed assessment of the effectiveness of the study was conducted, except for anecdotal remarks by teachers that, for many of the children, performance and behavior changed dramatically over the period of their participation (Chase et al., 1999).

Woodside, Santa Barbara, and Benner (1999) have reported small but significant reductions in post-traumatic stress after a school-based intervention.
designed to promote trauma healing in Croatian children. Their intervention provided an opportunity for traumatized children to express their memories and feelings, such as experiences of loss, separation, and grief, and combined that with work on non-violent conflict resolution, awareness of ethnic bias, education on human rights, and perspectives on peaceful living. The intervention design used control groups, and included four months of weekly training sessions for intervention classes, averaging two hours in length, following the curriculum designed specifically for the project (Woodside et al., 1999).

Yule and colleagues (e.g., Smith, Perrin, & Yule, 1999) developed a psycho-social-educational program to address common early distressing reactions in war-exposed and other severely traumatized children, which can be delivered by people with minimal child mental health experience under the supervision of more experienced professionals (Yule, 2002). This program is organized to have two leaders with a group of 10 children, and consists of five half-day modules for all children followed by a meeting for those who have been bereaved. The five main sessions concentrate on helping children deal with the troubling symptoms of intrusion, arousal, and avoidance. A one-session meeting for parents that explains the intervention and gives them suggestions for helping their children is an essential element of the package. Although the program was used with children exposed to war trauma, there has been no study to assess the effectiveness of the program in this context. Nevertheless, unpublished preliminary data suggest that it has a positive effect, demonstrated through self-report data from other populations of children exposed to trauma (c.f. Yule, 2002).

**Specific mental health interventions**

**Role of mental health professionals**

Mental health clinicians are instrumental in assessing individuals, understanding and administering treatments, and in overseeing war-affected operations. The importance of cultural sensitivity has been discussed as it bears on the recognition and interpretation of symptomatology; however, it is equally relevant for planning treatment. Ideally, mental health counselors should have the linguistic, cultural, and psychotherapeutic skills necessary to bridge the gap between themselves as therapists and war-stressed and refugee patients (Kinzie & Manson, 1983). Boehnlein (1987) and Schwab-Stone et al. (2001) have noted the importance of being direct and assertive, yet open to the possibility of conflicting cultural concepts of illness and healing.

Mental health clinicians may also play a role at the policy level as consultants to those in political office. In some instances, there is greater likelihood of establishing interventions if the initiative is proposed by mental health workers whose specialized opinions are given weight (Kos & Derviskadic-Jovanovic, 1998). Beyond such access, mental health professionals, through shared research and other activities, often have wide international contacts around the world (MacQueen & Santa- Barbara, 2000) that may be mobilized for assistance in war contexts.

One the other hand, it has been noted that there is a tendency for mental health workers to over-emphasize their importance in situations of armed conflict and in the lives of war-affected populations, as well as to overestimate the impact of therapeutic interventions (Lowry, 2000). Kos and Derviskadic-Jovanovic (1998) note that 80% of the apparent mental health needs of an affected population may be addressed by non-mental health interventions that attend to basic needs, restoration of the rule of law, safety, security, and human rights. Psychotherapeutic skills and specialized knowledge may play less of a role in acute work with refugees than under normal working conditions.

**Individual versus group therapy**

Intervention programs for children exposed to war generally aim to enhance effective coping skills, promote resilience, and provide social support (Punamaki, 2002). In war-torn circumstances, group work is usually the treatment of choice for traumatized children (Jensen & Shaw, 1993; Becker, Castillo, Gomez, Kovalskys, & Lira, 1989; Udwin, 1993; Gillis, 1993; Corder, Haizlip, & DeBoer, 1990; Yule & Williams, 1990; Pynoos & Nader, 1988), since the use of the group format facilitates recognition that the participants are not alone with their feelings and problems (Gillis, 1993), that they can learn solutions for problems and coping from one another (Yule & Williams, 1990), and that they can try new problem-solving skills in a group. Also, in war contexts the group format is often a necessity of economic constraints and the limited numbers of available mental health professionals (Kos & Derviskadic-Jovanovic, 1998). Thus, there is a public health need for population-oriented outreach models for psychosocial rehabilitation and treatment (Kos & Derviskadic-Jovanovic, 1998) that can be implemented effectively and pragmatically with limited funds. To date, various group therapeutic approaches have been utilized in diverse settings; however, there is no clear evidence to support any particular modality of group treatment over another.

Ideally, all therapeutic interventions should be evidence-based (Yule, 2002), and unfortunately the evidence base for most of them is far from complete.

In forming therapeutic groups, and in facilitating the healing process, a few basic principles should be utilized whenever possible. For example, children who have had similar experiences should be placed together, as a feeling of belonging together and having gone through similar experiences can often be supportive and therapeutic (Yule, 2002). Children...
and youth who have been repeatedly displaced, and those who have experienced human loss should be grouped with others with like experiences. Some have suggested that an optimal format for work with children involves small groups of 6–8 same-gender individuals (Gillis, 1993). However, since use of same-gender groups may potentially lead to distancing children of different genders, it may be that this format should be preferentially used only in specific situations (e.g., work with rape victims).

For outreach to those in need, mobile mental health teams may be useful for visiting collective shelters and providing guidance and treatment (Neugebauer, 2002). The development of partnerships between such teams and key members of the community allows clinicians to concentrate on programs for training community counselors to provide support to affected individuals, families, and groups (Lowry, 2000).

At this point, there is no clear evidence that a particular degree of structure is optimal for war and postwar interventions with children and youth. A range of strategies from very structured (Galante & Foa, 1986) to quite unstructured (Yule & Williams, 1990) have been tried. Although different circumstances may require different approaches (Yule, 2002), the use of more structured approaches may be preferred due to the possibility of better quantification of the intervention for both clinical (e.g., later reproduction in other sites) and scientific purposes (e.g., assessment of effectiveness and understanding of the mechanisms underlying a successful treatment).

Individualized treatments can be offered to particularly vulnerable children or to those who are highly disturbed (Rahe, Looney, Ward, Tung, & Liu, 1978). Another approach is to use individual therapy for children whose problems persist despite group intervention (Yule, 2002). In all cases, interventions should be tailored with the particular context and the individual vulnerabilities and strengths of the children in mind.

Evaluation of the effectiveness of both individual and group therapeutic psychosocial programs is difficult because of the challenges inherent in conducting detailed research assessments, which can be very time and resource consuming. Even with sufficient time, energy, and money to conduct scientific evaluations in emergency situations, obvious problems remain, such as the overriding ethical considerations of creating control or comparison groups. A scientifically viable alternative, however, is to conduct comparisons between different treatment modalities (e.g., Harrington, Cartwright-Hatton, & Stein, 2002).

**Specific therapy techniques**

Unfortunately, relatively little has been formulated about specific therapy techniques for war-affected children, and even less is known about the effectiveness of such techniques. Most studies emphasize the need for wide sustainable impact on many children and for long-term interventions (Boyden & Gibbs, 1997; Dawes, 2000; Wessells & Monteiro, 2000), as well as the importance of pan-cultural practices for therapy administered by mental health professionals. However, few detailed research-supported recommendations have been made. More information is available in the clinical research literature pertaining to the treatment of PTSD resulting from traumatic experiences in community and domestic (non-warfare) contexts; however, the capacity for transfer to wartime settings has not been adequately evaluated.

Generally speaking, treatment approaches for childhood PTSD represent adaptations of approaches used with adults (Yule, Perrin, & Smith, 2001). In a recent study by Cohen, Mannarino, and Rogal (2001b), treatment practices for childhood PTSD were reviewed using a sample of 241 child psychiatrists and physician therapists who were surveyed regarding interventions used to treat traumatized children with symptoms of PTSD. Ninety-five percent of medical respondents used pharmacotherapy (Cohen et al., 2001b), although systematic assessment of pharmacological treatments for traumatized children has been limited (Laor & Wolmer, 2002; Perrin et al., 2000; Vogel & Vernberg, 1993). While medications are effective in alleviating anxiety or depressive symptomatology (Terr, 1983), psychopharmacological treatments are less effective in reducing symptoms such as avoidance, isolation, and emotional numbness (see Laor & Wolmer, 2002). Hence, medication cannot be considered the sole mainstay for treating war-related posttraumatic states (Laor & Wolmer, 2002 referenced to Shiloh, Nutt, & Weizman, 1999). Additionally, mass administrations of drugs and the urge to reach large numbers rapidly can easily feed into anarchic management and non-professional medication of children (Laor & Wolmer, 2002). Furthermore, the economic resources for child war-relief programs are rarely capable of covering medication costs for the numbers of those in need. Thus, emphasis should be on the implementation of simple, low-cost, group-based non-specific therapeutic interventions.

Despite lack of consensus concerning the optimal therapeutic modalities for children experiencing symptoms of PTSD, some techniques (e.g., cognitive behavior therapy) have received attention and praise (e.g., Smith et al., 1999). However, the paucity of these studies necessitates reliance on some evidence for the effectiveness of these interventions with adults. The psychotherapy intervention that has received the most attention is cognitive behavior therapy (CBT) (Silverman et al., 1999; Smith et al., 1999). Kendall (1994) found that individual CBT led to improvements in anxiety disorders, as did Barrett, Dadds, and Rapee (1996). It has been noted, however, that although an increasing number of CBT
studies point to its efficacy in ameliorating PTSD following violence, the methodological rigor of many studies has not been optimal (Bryant, 2000).

Other intervention strategies have utilized a variety of methods including play therapy, expressive art, music, drama, meditation and prayer (Lowry, 2000), approaches mainly linked by the principle of endorsing and validating talents and abilities. Miller and Billings (1994) have used a variety of arts techniques to help Guatemalan and Argentinean children express their thoughts and feelings about growing up in exile. Other authors have stressed the importance of promoting imagination, learning, decision-making and self-efficacy, or have introduced sports that require interdependency as a strategy for promoting increased levels of trust (Lowry, 2000). One of the primary purposes of such therapy is to help the child master his/her distress through regaining a sense of control over the situation and his/her feelings. In this sense, therapeutic approaches using the promotion of emotional processing, relaxation, and cognitive behavioral techniques have been suggested and described in detail elsewhere, in particular by Yule and colleagues (Perrin et al., 2000; Smith et al., 1999; Yule, 2002), as well as other authors (e.g., Palace & Johnston, 1989; Rachman, 1980).

Although asking children to draw their experiences can be useful in helping recall both traumatic events and associated emotions (Galante & Foa, 1986; Newman, 1976; Pynoos & Eth, 1986), merely drawing the trauma is not a sufficient therapy and may even be re-traumatizing per se (Machel, 2001). In a recent study from former Yugoslavia, emphasis was placed on facilitating children’s expression of emotion through drawing and other expressive techniques, yet following treatment there was no measurable change in children’s adjustment on a range of self-report measures of stress reactions (Bunjevac & Kuterovac, 1994).

Another popular, and more controversial method of therapy used for treating trauma-related symptoms (although, again, the published data come mostly from studies on adults) involves debriefing. Initially, psychological debriefing was designed for professional use, as a single session group intervention to be conducted 24–72 hours after critical incidents, in hopes of preventing the development of psychological problems, and most commonly PTSD (Arendt & Elkit, 2001). Others maintain that debriefing allows expression of traumatic experiences, facilitates relaxation, promotes cognitive-organization, restores self-worth and hope, and prepares for future experiences (Laor & Wolmer, 2002; Stallard & Law, 1993). While some studies have found positive effects for psychological debriefing (Jenkins, 1996; Shalev, Peri, Rogel-Fuchs, Ersanana, & Marlowe, 1998; Bohl, 1991; Chemtob, Tomas, Law, & Crenniter, 1997), others have found no effect (Carlier, Voerman, & Gersons, 2000; Conlon, Fahy, & Conroy, 1999; Deahl, Gillham, Thomas, Searle, & Srinivasan, 1994), or even suggested possible negative effects (Bisson, Jenkins, Alexander, & Bannister, 1997; Hobbs, Mayou, Harrison, & Warlock, 1996; Kenardy et al., 1996). Thus, early exposure to distinct memories of traumatic events may interfere with the affective-cognitive processes that lead to recovery and may even result in an exacerbation of symptoms (Mayou, Ehlers, & Hobbs, 2000; Wessely, Rose, & Bisson, 1998). In a review of the effectiveness of psychological debriefing in adults, Arendt and Elkit (2001) conclude that debriefing does not prevent psychiatric disorders or mitigate the effects of traumatic stress, whereas Dyregrov (1998) has argued that the quality of studies to date does not justify a discontinuation of its use. In children the situation looks a little more optimistic (Yule, 2002), and several studies have demonstrated the effectiveness of debriefing in children exposed to a range of traumatic events (Yule & Udwin, 1991; Stallard & Law, 1993); this, however, has not been systematically assessed in war-like circumstances. It has been emphasized that although expressing and sharing feelings is one of the crucial elements of debriefing, no one has to talk during the session (Yule, 2002). There is some complicating, anecdotal evidence that in the past children were not only encouraged, but sometimes rather pushed to talk about their feelings (e.g., Neugebauer, 2002).

Additionally, it should be noted that many professionals/studies use different definitions of debriefing, and in order to arrive at a better understanding of the risks and benefits of this strategy, both the definition and objectives for debriefing should be clarified and the method refined. (Those interested in a more detailed description of the method may wish to consult Yule (2002) and Laor and Wolmer (2002)).

A number of methods await systematic evaluation, although there is some preliminary evidence supporting their effectiveness in alleviating the effects of trauma in children, including methods such as stress-inoculation techniques (Ayalon, 1983) and the widely questioned eye-movement desensitization and reprocessing (EMDR) (Puffer, Greenwald, & Elrod, 1997). In addition, a number of methods have been used with adult populations, but no systematic reports yet exist of their use in children (for a review of some alternative approaches to the treatment of trauma see Dietrich, 2000; Dietrich et al., 2000).

Methodological shortcomings and challenges

Methodological shortcomings and challenges in research on children in war include widespread use of self-report data only, with insufficient attention to whether symptomatology produces any significant impairment in psychosocial functioning, and lack or absence of attention to culture-specific symptoms and ways of coping with trauma. Careful assessment
of symptoms is needed not only for identification of psychopathology and for identification of children in need for additional interventions, but also for understanding the dynamics of traumatic symptoms and of the factors influencing those dynamics. These are important in determining the long-term needs and hence, in planning future interventions; likewise, the use of post-intervention assessment is essential to drawing clear conclusions about the effects achieved.

Unfortunately, many published studies provide only short, if any, descriptions of their interventions, and thus, replication and dissemination of successful interventions remain problematic. Similarly, there is little information on the types of evaluation studies that have been carried out, and their strengths and weaknesses. Many studies do not have representative samples, and there is a lack of random-control designs. Also, disparate terminologies are used in characterizing the interventions, and thus, the same terms are often used interchangeably for different concepts.

Intervention studies should also consider the use of control groups. It is crucial not to cause harm, and since to date there is only a limited body of evidence on the effectiveness of most of the existing interventions with war-exposed children, the use of a modified control design is appropriate both ethically and practically. This does not suggest that children in control groups should be left without any support, but rather as in a study by Dybdahl (2002a, b), it is possible to compare the effects of a combined intervention that involves an unproven component plus the known necessary component versus the known necessary component only (e.g., basic medical care). A recent book by Machel (2001) provides examples of ‘trauma therapies’, interventions, or interviews that ‘lead children to recount or relive their worst moments’ (p. 86), the use of which is inappropriate and potentially damaging.

It is important to understand the rationale on which the interventions are based and on which conclusions are drawn. For example, what are the practical and economical considerations for the use of a particular intervention? In future efforts, it is critical to compare different intervention strategies to provide empirical data about how children are best helped and whether different psychosocial and treatment approaches are empirically founded.

Conclusions

Culturally sensitive diagnostic approaches are needed to assess trauma symptoms and associated impairment. Immediate relief operations can start with non-specific interventions to help groups of affected individuals organize around issues of feeling safe and to promote perspectives for the future that involve mastery and engagement in rebuilding. Individualized treatments in the post-trauma period are usually not feasible as a first-line strategy, especially considering the shortage of mental health professionals and greater costs as compared to group interventions. It is important to instruct parents and teachers in recognizing children’s distress and in applying appropriate strategies that address children’s needs. Specific interventions are usually best delivered in group format. Intervention considerations and their scope should be community-oriented to promote normalization of life and active child involvement. And, despite the scientific challenges posed by the extreme context in which these interventions must occur, applied research initiatives are sorely needed to inform policy and the development and refinement of intervention programs for children traumatized by war.

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