Caring for children and adolescents in the aftermath of natural disasters

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Abstract

The recent Southeast Asia tsunami confronted countries with the challenge to provide mental healthcare to children and adolescents who experienced loss, displacement and disruption of daily lives. The region that was affected is resource poor, however a great deal could be learned about the needed approaches to care, and the cautions that had to be exercised to avoid doing harm. The experience highlights the need to enhance the capacities for appropriate needs assessment, diagnosis, triage and post-disaster support in terms of schooling and employment.

Introduction

When considering appropriate interventions for children and adolescents in post-disaster situations, such as the recent East Asian tsunami, it is important to have a developmental perspective and to recognize that children and adolescents have unique needs. Children represent a high percentage of the population in many of the countries most recently affected by natural disasters. Children with their natural dependency are particularly at risk as a result of being orphaned, parental stresses, and being disrupted from significant parts of their lives, such as, school and association with peers. Children have certain specific vulnerabilities when they experience the death of family members, friends, teachers and others and/or are displaced from their homes, and community. These assaults on the psychosocial development of children and adolescents, coupled with normal tasks of development, underscore the need for attention to child and adolescent mental health in considering the appropriate and necessary responses in the aftermath of disaster. While psychological and psychiatric need presents one of the largest problems in post-disaster reconstruction deficiencies in the capacity to provide such care are severe (Komesaroff & Sundram, 2006). The absence of trained psychiatrists, psychologists or other trained mental health professionals in the affected area is particularly striking (Komesaroff & Sundram, 2006; WHO, 2005b).

Most children experiencing disasters, conflict and other traumatic events have mild to moderate levels of distress but remain functional (Kostelny & Wessells, 2005). Common wisdom and experience underscore the need of children to feel secure in the face of stressful situations such as natural disasters. It is known that children derive security from maintaining routines and staying connected to their family and institutions. From this core principle, a number of specific steps are identified as intervention priorities post-disaster. Family re-unification, the re-building of schools and the re-establishment of normal routines are essential. However, from experience, these principles of intervention must be operationalized with the realization that the efforts to re-establish a semblance of normality must fit with the local culture, be non-stigmatizing, and be consistent with ongoing efforts to develop sustainable programmes.

This paper will focus on the cautions needed to be observed in the implementation of sustainable programs.

Existing guidance and principles of care

A number of professional groups and organizations have developed guidance for how to respond in the aftermath of a natural disaster. The World Health Organization from its headquarters in Geneva and the Southeast Asia Regional Office have synthesized useful guidance (www.who.int/mental_health/) (SEARO web page) An example of professional organization guidance comes from the International Association for Child and Adolescent Psychiatry and Allied Professions (IACAPAP)(www.iacapap.org).
Virtually all guidelines underscore the need for anticipatory planning with the establishment of responsive infrastructure that will ensure early warning, if possible, but certainly post-disaster communication between affected populations and responsible authorities. A challenge then is to establish more universally disaster management structures and psychological support structures that further the development and implementation of specific psychosocial support and clinical programmes.

A key principle is to do no harm. Unfortunately, this remains a challenge due to several factors including lack of knowledge of appropriate care for children and adolescents. Of even more concern is the lack of knowledge but the conscious provision of modes of care not adapted to the needs of children in a particular cultural context or that do not fit the specifics of the clinical status of the children. This leads to potentially harmful interventions yielding re-traumatization and regression. As stated by Komesaroff and Sundram (2006) ‘a significant task of a disaster health care response has become the prevention of adverseiatrogenic interventions initiated by either local or international agencies’.

In the rush to provide care for children and adolescents, some interventions unwittingly do harm. The premature diagnosis of a psychiatric disorder can result in serious unintended consequences that are not easily reversed in the months and years post natural disaster. Even when, as noted, the incidence of significant child psychopathology is relatively low, there too often appears to be a propensity among disease-focused NGOs and certain providers to emphasize the diagnosis of PTSD (Weiss, Saraceno, Saxena, & van Ommeren, 2003). The validity of this diagnosis has been challenged particularly when applied across cultures (Summerfield, 2001; Weiss et al., 2003). It is to be expected that the symptoms associated with PTSD are to be reported at elevated rates in the initial weeks after trauma exposure, but symptoms do not equate with a disorder and, in fact, may represent a normal reaction not indicative of any emerging psychopathology (Bryant, 2006, 2003; Wakefield, 2003). As stated by Wakefield (2003) psychiatric indices (such as PTSD) defined solely by the endorsement of symptoms might inflate prevalence rates unless psychosocial impairment is measured. This is a criticism that can be applied to the recent study of Thienkrua (2006) reporting on the prevalence of PTSD among tsunami-affected children in southern Thailand. Likewise, the utility of making the diagnosis of Acute Stress Disorder (ASD) as a predictor of later psychopathology has been called into question (Bryant, 2006).

Rational care (WHO, 2003) is a concept that needs to underlie the provision of mental health care for children. Such care emphasizes appropriate diagnosis and the use of treatments that will do no harm to the child in the present or future. Thus, the inappropriate use of medication is to be avoided and the use of therapies for PTSD, such as, de-briefing, ventilation or eye movement desensitization reprocessing (EMDR) are to be avoided (Seidler & Wagner 2006). More unusual forms of treatment have also been seen that are totally without validity or effectiveness. The ways to ensure rational care can be taught to the full range of healthcare providers in the community and institutions. It must be borne in mind that the instruments used to screen for symptoms of PTSD and depression in most studies do not provide clinician verified diagnoses and some symptoms of PTSD and depression found among children in camps may have been associated with the camp experience itself and not tsunami specific (Thienkrua, 2006). Thus, interventions must be undertaken that are appropriate to the clinical assessment and not a response to the data derived from screening instruments.

The recent delineation of a new diagnostic entity—Developmental Trauma Disorder—provides a way to integrate a developmental perspective with the multitude of symptoms described in the past as related to PTSD. This significant advance in conceptualization among those interested in PTSD is articulated by van der Kolk (2006). He states that ‘the diagnosis of PTSD is not developmentally sensitive and does not adequately describe the effect of exposure to childhood trauma on the developing child’. He endorses Tucker’s (1992) statement that ‘many problems of traumatized children can be understood as efforts to minimize objective threat and to regulate their emotional distress.’ Van der Kolk (2006) goes on to state that ‘unless caregivers understand the nature of such re-enactments, they are likely to label the child as “oppositional”, “rebellious”, “unmotivated” or “antisocial.”’

A challenge in resource-poor, developing countries will be to provide guidance and technical assistance to countries to develop baseline data on mental health resources, risk populations (children and adolescents) and emergency capacities similar to that available in Thailand (SEARO, 2006). Finding acceptable ways to get information about harmful interventions to those who will monitor care or be trained to deliver care is a task that should be taken up by all countries.
Cultural appropriateness

An understanding of culture is crucial to the development of appropriate programmes for children and adolescents. Programmes that do not fit with the local culture can be stigmatizing, rejected by those who are targeted or place the young people in conflict with their community environments.

From a clinical perspective, the need to assess children and adolescents for their response to trauma is of major importance. The past decade has seen an enormous increase in the number of instruments purported to assess trauma responses, but understanding the psychometric properties of these instruments and their appropriateness in differing cultures remains incomplete (Strand, Sarmiento, & Pasquale, 2005). Assessment of children in the aftermath of a natural disaster should consider not only current symptoms, but past history as well. Given the high likelihood of the amelioration of symptoms, labelling should be avoided. Assessment should be seen as a process with both an acute phase and a long-term phase. When the small number of children with significant psychopathology is identified there is the responsibility to provide an appropriate form of care within the scope of available resources and not stop with a diagnosis. It must be remembered that complex disasters have an impact on the community as a whole (Momartin, Silove, Manicavasagar, & Steel, 2004). The loss of family and social networks can become disabling and lead to the requirement for specific grief therapy (Silove & Bryant, 2006).

From a psychosocial perspective it is common to witness a multitude of educational programmes provided to youth by NGOs in the aftermath of natural disasters. It should be an expectation that the nature of the school and the educational programmes fit with the culture and values of the community, however, this is often not the case. The subjects taught should be appropriate to the level of the student and culturally appropriate. The content should be devoid of religious messages not in concert with those of the local community. The experience with some NGOs, particularly those from outside a country or region, is that they are too often focused on providing what they think is best or appropriate without appreciating local culture and needs. NGOs may have a ‘product’ that they believe to be useful which is employed as a standard package regardless of a locality’s varying ethnic or religious make-up and with often quite discrepant past histories of education. These same programmes all too often fail to take into account the varying developmental needs and capacities of children and adolescents. An area too often neglected, but of special importance is the implementation of meaningful, utilizable vocational training that will provide a skill set to help the adolescent with employment and to diminish the possibility of idleness that leads to substance abuse and criminality.

Much has been made of the use of ‘emergency education’ post disaster and the wider use of schools for the delivery of child mental health services. Closer scrutiny suggests that the claims for these interventions may be overstated given the observation in Indonesia, and perhaps elsewhere, that prior to the disaster and in the period following the acute phase of a disaster, access to school for the most vulnerable populations is, in fact, limited by lack of financial resources and other barriers. The public financing of education is not as many would believe widely available in developing countries and parents or others must pay for their children to attend school. Thus, the poorest individuals often do not go to school and thus would not be reached by mental health interventions focused on schools. Planning then for child mental health services must go beyond the use of schools to reach out to those who are perhaps most marginalized and at risk. This is seen dramatically in the government-sponsored post-tsunami camps that remain and where activities for young children and adolescents are woefully inadequate. In some camps there is evidence of growing anti-social behaviour as time extends beyond the acute period and the physical environment in the camps deteriorates. As stated earlier, the absence of meaningful vocational education is a particularly glaring gap.

Play is important, particularly for young children, but should not be the only intervention, as a return to education and vocational training is more normalizing. Play can be used most constructively in temporary camps when ‘child friendly’ spaces are established. These child friendly spaces also may serve as a place where children can be observed for possible difficulties with adaptation and symptoms of distress. Observation suggests that the ‘child friendly’ spaces may not be preserved once the original NGO sponsor has departed and thus there should be consideration of how to get the community to take ownership of these potential long-term resources.

The experience post-tsunami and after other recent natural disasters should alert providers to recognize the limitations of schools as a resource for the most vulnerable populations who may not have ever attended school or are unable to attend school due to post-disaster circumstances. There is the opportunity to support innovative means for providing child mental health services that will reach those who do not use primary care services or access school.
Family support

The disruptions and losses experienced as a result of the tsunami impact all family members including mother, father, siblings and relatives. The loss of family members, the loss of the ability to earn a living, the disruption to schooling and the disruption in long established routines have demonstrable psychological effects. The indirect impact on the family from loss of income compounds the direct emotional distress. Parents, in particular fathers, without work are vulnerable to substance use and abuse, abuse in the home, depression and suicide. Loss of livelihood has been shown to be independently and significantly associated with anxiety symptoms, depression symptoms and PTSD (van Griensven et al., 2006). Children who felt a family member had been in danger, or lost to the tsunami were at increased risk for depression (Thienkrua, 2006).

Maternal depression must be identified following disasters (Cheng, 2006). There is the possibility that truly depressed mothers can be overlooked in the overwhelming events following a disaster. It is now demonstrated that maternal depression is perhaps one of the most crucial factors in the development of psychopathology in children (Weissman & Jensen, 2002). When it occurs in the post-partum period it can influence bonding and later lead to difficulties with the expression of affect on the part of the child or even cause depression in the children of the mother. A way to detect maternal depression is through post-partum visits by nurses or home visiting as part of broader community-supported intervention programmes for those affected by the tsunami or other disasters. Midwives or those overseeing well-baby care are a potential resource for the identification and triage of affected mothers.

Interviews with workers suggest that they are either ill-prepared to deliver these services or too burdened to take on the task. Observations at primary healthcare clinics in Indonesia suggest that such clinics are not able to provide meaningful basic mental health intervention due to lack of skills, turnover of staff and barriers to access due to lack of ability to pay for services. Thus, emphasis needs to be placed on providing focused, understandable interventions.

Training for care

A crucial concern in providing for those in a disaster situation is to have well-prepared and trained providers (Weine et al., 2002). Providers come from the healthcare and education sectors, and the community. It remains a challenge to have potential providers of post-disaster care take up the appropriate training (Cohen, 2001). It is too often the case that potential providers are already overwhelmed with their tasks or lack the basic knowledge to allow for the comprehension of the guidance needed to provide post-disaster services. Most often there may be a partial comprehension of the key principles (Chatterjee, 2005), but significant gaps in the understanding of how to implement the interventions. Sustained training is difficult to accomplish without the provisions of incentives, financial and otherwise.

It is necessary to demonstrate in some meaningful way how the proposed interventions benefit the recipients. At the community level, once demonstrated, providers, regardless of background, appear more likely to take up the needed skills and have a long-term commitment as providers. When the lessons are abstract or not culturally attuned the likelihood of recruited providers to continue the provision of care in the area of mental health is minimal. Follow-up by supervisors or trainers is needed to ensure continued fidelity in the implementation of programmes. For children and adolescents this is particularly important because of the tendency of workers to identify with the needs of the children and rather than provide therapeutic or ultimately supportive care, an unsustainable degree of dependency is fostered.

Media

Children are particularly susceptible to the messages and images seen on television (Wooding & Raphael, 2004). It was found that post 9/11, it was actually those children farther away from ground zero who expressed more pathological concerns (Lengua, Long, Smith, & Meltzoff, 2005). It was determined that this outcome was due to the repeated exposure to the traumatic aspects of the events without the support offered to those closer to the disaster. The media can serve as a powerful positive influence in disseminating educational materials and diminishing misperceptions but also has the potential through sensationalism or lack of understanding to magnify the concerns of children and adolescents.

It should be part of any disaster protocol to involve the media and explain the ways in which they can be helpful or harmful in the lead-up to and aftermath of a natural disaster. The development of a ‘code of conduct’ for the media in regard to the reporting of disasters that could be used at the country level to reduce the exposure of children to repetition of traumatic events is a useful intervention. This was illustrated successfully in Thailand where appeals through the media were used to ask for specific
donations, ask to stop sending donations and to normalize activities.

**Policy**

An irony is that natural disasters can be a stimulus for the development of national policies to promote child mental health, not only targeted at the needs in emergent situations, but for care in all situations (Munir, Tuncay, Tunaligil, & Erol, 2004). Policy at the national and local level is essential to ensure the development and sustaining of child mental health programmes. Policy should be based on a locally relevant needs assessment. For children and adolescents such a needs assessment differs from other types in that multiple informants are absolutely necessary and the needs over a longer developmental period need to be considered. The techniques for appropriate needs assessment can be taught to a wide range of personnel. WHO has developed a guidance manual on child and adolescent mental health policy that can be downloaded from the WHO HQ (WHO, 2005a). The manual provides a great deal of basic information on how to formulate policy consistent with local and national needs.

**Sustainability**

Intervention programmes in post-disaster circumstances are only as good as their ability to be sustained or transitioned from the acute phase to more long-term support for clients and citizens (Remschmidt & Belfer, 2005). For children, the disruption of programming is particularly detrimental in that it indicates for the child or adolescent the unreliability of offers of help and the longer-term support that is expected. This itself can be re-traumatizing. It is too often the case that NGOs are only present during the acute phase and when the media leave they leave.

Governments have a responsibility to demand sustainable programme development and to support it. Thus, all need to consider longer term financing mechanisms, the prioritization of programmes to be supported and the nature of the problems to be dealt with (Grimes & Mullin, 2006). It is possible and has been demonstrated that key programme elements first instituted in the context of emergency care can be sustained in mainstream activities when there is administrative, governmental and community support (Cheng, 2006; Munir et al., 2004). Examples include school counselling, community drop-in centers affiliated with ongoing religious or communal centres or outreach to ‘at-risk’ mothers or families.

**Innovation**

Innovation may come from the magnitude of the challenges post-tsunami. In particular, the creative use of volunteers at the community level provides a bright spot in the overall picture of limited resources. The training programmes for the community workers in several countries are impressive in scope and in execution; however, it is clear that not all countries are able to mount programmes comparable to those in Thailand. Indonesia is perhaps considering one of the most creative programme initiatives that could reach those hard to reach, is sustainable and may provide vocational pathways for those involved. In Indonesia there are plans to utilize the Scouts (Guides) to provide peer group mental health services in communities and schools. The idea is in the beginning phase but worthy of the effort needed to develop it into a model for future dissemination.

To avoid duplication of effort or the implementation of programmes previously proven to be ineffective, the development of regional exchanges for the dissemination of information on ‘best practices’ for dealing with post-disaster interventions would be a welcome advance. At the regional level there is likely to be a greater sensitivity to culturally acceptable interventions. A web-based best practices publication (could be updated regularly) would help to influence the use of accepted techniques for intervening with children and adolescents. For children and adolescents this document would provide examples of work with schools, vocational training for adolescents, programmes to help children and adolescents with previously diagnosed mental illness in the aftermath of disasters.

**Conclusions**

During the past decade the exposure of children and adolescents to natural disasters and the recognition of their responses both in the short term and long term have been substantially better understood. The challenge is to now implement what is known with particular attention to eliminating from the array of acute relief responses those interventions known to be harmful or ineffective and more broadly implementing those effective interventions which not only promote short-term benefits but enhance sustainable programming for child and adolescent mental health.

**References**
