Early Childhood Care and Development in Emergency Situations

Annotated Bibliography

Prepared by Jacqueline Hayden, Rosemary Dunn, Kathy Cologon of the Children and Families Research Centre, Macquarie University, Australia

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Early Childhood Care and Development in Emergency Situations: Annotated Bibliography

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Consultative Group on Early Childhood Care and Development (CGECCD)

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Introduction

This annotated bibliography reflects the findings from a scoping exercise to identify the published research about young children in emergency and disaster situations.

Following the scoping exercise an advisory group of key informants submitted several resources from their own libraries. This included grey literature and other articles, monographs or reports which had not turned up in the scoping exercise. The submissions were screened for accessibility. Those which are readily available in the public domain were included in this bibliography. In the list of articles under thematic groupings, those which were NOT part of the original scoping exercise are indicated with an asterisk*.

The original scoping exercise turned up 219 articles. With the recommended submissions, the bibliography now contains 274 items.

Originally, we had included the terms children and emergency and children and conflict in the scoping exercise, but these tended to bring up large number of articles which were not directly related to the topic (such as medical emergency literature and literature about domestic conflict). Similarly a larger number of search engines were originally included, but two were found to be most useful: Academic Search Premier and PsycINFO. Other engines that were trialled tended to bring up articles already identified from previous searches and/or articles that were not peer reviewed and/or difficult to obtain.

The authors suggest that use of other key terms and other search engines could enhance this bibliography. The lack of articles from non-English speaking sources is a significant gap in the literature presented herein.

Thematic groupings

Thematic groupings of research findings were not pre-determined. These emerged from several brainstorming and review sessions by members of the research team, as the scoping results materialised. Articles in the bibliography are listed alphabetically in the first section of this document. Following this, the articles are grouped according to the thematic groupings which emerged. These are:

1. **Need**: articles that identify the needs of children in emergency and disaster situations, including global statistics.

2. **Interventions**: articles that describe interventions and outcomes:
   - art therapy
   - child friendly spaces
   - classroom based interventions (CBI)/school based interventions
   - community based interventions
   - health
   - play based/therapy interventions
   - intervention policy
   - post traumatic stress symptoms and interventions
   - psychosocial symptoms and interventions

3. **Type**: articles that report on issues and outcomes for young children according to type of emergency/disaster.
   - Human Conflict
     - armed conflict & social unrest
     - terrorism
   - Other Disasters
     - earthquake
     - fire
     - flood
     - industrial/man made
- nutrition
- storm events (hurricane, cyclone, tornado)
- tsunami

4. **Curricula, resources, training and dissemination of information:** articles that describe programs and issues relating to training of caregivers or others in emergency/disaster situations and to issues relating to the dissemination of information about the needs of young children.

5. **Research:** articles that discuss research issues associated with young children and emergency/disaster situations

6. **Review articles:** articles that provide overviews of the current literature or state of knowledge about various topics.

7. **Special Groups:** articles that address the needs of specific populations:
   - Prenatal Exposure to Disasters
   - Prenatal Needs
   - 0-3 years age group
   - 4-8 years age group
   - Women
   - Parents & Carers
   - Older People

8. **Australian research:** articles that emanate from Australian research projects and/or by Australian authors.¹

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¹ This grouping was added when it was noted that there is a unique and significant literature from Australian sources – primarily dealing with natural disasters, especially fires and recovery programs with young children.
List of keywords

For all of the databases used, a keyword search was conducted using combinations of the following terms:

<table>
<thead>
<tr>
<th>AGE</th>
<th>EVENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>young children</td>
<td>disaster</td>
</tr>
<tr>
<td>children</td>
<td>emergency</td>
</tr>
<tr>
<td>child$2</td>
<td></td>
</tr>
</tbody>
</table>

In initial searches each combination included a term drawn from each of the columns headed 'AGE' and 'EVENT.' Searches were also carried out with each combination and the keyword "preparedness," thus representing a total of 12 unique combinations of terms used, for example:

- Young children AND disaster
- Young children AND preparedness AND disaster
- Young children AND emergency
- Young children AND preparedness AND emergency
- Children AND disaster
- Children AND preparedness AND disaster
- Children AND emergency
- Children AND preparedness AND emergency
- Child$ AND disaster
- Child$ AND preparedness AND disaster
- Child$ AND emergency
- Child$ AND preparedness AND emergency

Searches produced titles with and without the keywords listed.

The searches including emergency were discontinued because results obtained in initial searches tended to focus more on medical procedures, especially in hospital casualty/emergency departments and medical research.

Searches for the following key words were conducted as single searches:

- child friendly spaces
- child centered spaces (alternative spelling centred also tried)
- child safe spaces

Criteria for including studies

The following criteria were used in the selection of available publications identified in the searches as relevant.

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2 The $ is a symbol recognised by search engines to include multiple endings for a word. Thus child$ will search for *children, child’s, childhood*, and similar words. Young children and children were truncated to child$ because so few results were obtained with the first keywords. Databases function differently when no results are directly returned from keyword searches. Some return a zero result and others, EBSCOHost searches for example, return a very broadly inclusive “smart text” result, sometimes totalling many thousands of items. A thesaurus of categories within these were provided by the database and then applied, as outlined below. The use of child$ did produce more specific results in most cases but the “smart text” searches at times also provided some useful results. These results were ordered in terms of a database determined relevance scale and were viewed down to a level of 50% relevancy.
- international and Australian based literature
- include a focus on children aged under 10 years of age (some material relating to other age groups was included for purposes of age comparison)
- empirically-based quantitative and/or qualitative studies that discuss original research OR
- include a focus on interventions carried out in disaster or emergency situations and their evaluations OR
- include a focus on policy and strategy decisions made in relation to disaster preparedness
- English language publications

Grey literature: In a subsequent search grey literature was added. This was obtained primarily through Google searches.

Reviews of literature were also included as a way to obtain overviews of various issues over time by experts in those fields and to gather references to other peer reviewed literature the keywords had not produced results for.

**Databases searched**

Searches for academic articles, books and reports were conducted using the following databases:

- **Academic Search Premier**
  - (EBSCOHost)
  - restricted to full text available, peer reviewed references only, 1995-2009
- **Psychology and Behavioural Sciences Collection**
  - (EBSCOHost)
  - restricted to full text available, peer reviewed references only, 1995-2009
- **PsycINFO**
  - (Ovid)
  - restricted to peer reviewed references only, 1995-current
- **Expanded Academic ASAP**
  - (Gale Cengage)
  - Restricted to peer reviewed references only, 1995-2009
- **Wiley Interscience**
  - Journals, 1995-2009

A detailed summary of the results obtained for each database is shown below.
# Database searches and results

**DATABASE: Academic Search Premier (EBSCOhost)**

List of all keyword combinations used searching from 1995 to 2009. Restricted to full text, peer reviewed journals.

<table>
<thead>
<tr>
<th>Keyword Combinations</th>
<th>Docs. retrieved</th>
<th>Docs. omitted</th>
<th>With abstract</th>
<th>Without abstract</th>
</tr>
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<td>0</td>
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<tr>
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<tr>
<td>Subject Thesaurus Results within these results:</td>
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<td></td>
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<tr>
<td>A + emergency management</td>
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<td>Child$ AND disaster</td>
<td>410</td>
<td>302</td>
<td>108</td>
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<tr>
<td>Child centred spaces (no date limit)</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Child safe spaces (no date limit) (NB: results focus on extent to which institutions and societies consider the needs and perspectives of children)</td>
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<td>Child friendly spaces</td>
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</tbody>
</table>

**DATABASE: Psychology & Behavioural Sciences Collection (EBSCOhost)**

List of all keyword combinations used searching until November 2009. Restricted to full text and peer reviewed sources.

<table>
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<th>Keyword combinations</th>
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</tbody>
</table>
**DATABASE: PsychINFO (Ovid)**

List of all keyword combinations used searching from 1995 until November 2009. Restricted to full text, peer reviewed and English language.

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</table>

**DATABASE: Expanded Academic ASAP**

List of all keyword combinations used searching until 2009. Restricted to peer reviewed articles.

<table>
<thead>
<tr>
<th>Keyword combinations</th>
<th>Docs. retrieved</th>
<th>Docs. omitted</th>
<th>Documents included</th>
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</table>
**DATABASE: Wiley Interscience**

List of all keyword combinations used searching from 1995 until December 2009.

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<tr>
<td>child safe spaces</td>
<td>56</td>
<td>56</td>
<td>0</td>
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</tbody>
</table>
Reference List


Annotated Bibliography


The civil war in Sudan and the natural disasters of drought, famine and desert forming, led to the displacement of many people. The number of displaced people that now live in and around Khartoum is estimated at 2.2 million, half of whom are under the age of 18. They live in barren, remote peri-urban areas surrounding Khartoum. Displaced children face many challenges in finding ways to live and survive. One of the greatest of these is how to meet their basic needs of food, shelter, health, and education. The majority of displaced children work. Some work and go to school while others just work. Children go to work because life is expensive and they must support themselves and their siblings or even their parents. In this paper the researcher will discuss how displaced children fight and struggle for their right to education. There are cultural, social, and economic reasons for children's lack of access to education. This paper discusses the problems that displaced children face when they have to combine work and school, and why this leads to a high drop-out rate. The Convention on the Rights of the Child was ratified by Sudan in 1990, but still results are not what were expected and children face many challenges. The paper also argues that if laws concerning child labour in Sudan were complied with and enforced, then child labour would be minimal or non-existent. This paper will present the experiences of two children aged 13 and 14 who both work and attend school and the challenges that they face in combining work and school. The obstacles that displaced children face in life will be discussed and recommendations will be presented to help solve the problem.


The editorial discusses child, youth, and parent responses to the terrorism of September 11, 2001 and its implications for applied developmental science and practice. We have learned that the events of September 11th have affected a range of outcomes; not just posttraumatic stress disorder (PTSD) but other mental health outcomes. There are also several indications of stage-specific developmental responses to the events of September 11th. Adolescents and adults found different types of coping strategies helpful. Effective mental health interventions will need to target developmentally appropriate programs at different ages of children and youths. In light of this reality, it is valuable for science policy agencies to continue to improve their capacity to identify and support the expansion of studies already in the field in areas of disaster as well as to contract with research centers that can prepare in advance to rapidly field new studies. Just as it is helpful to turn to the broader disaster literature to provide context for understanding the empirical findings on the effects of the events of September 11th on children, youths, and parents, so too is the broader literature helpful in thinking through the implications of these studies for mounting program and policy responses.


Australia has a well-established emergency management system to manage the threats to communities from natural and technological hazards. The key elements of the system are described with particular emphasis on the impact of disasters on Australia, fundamental concepts, and principles of planning. Emergency physicians have a key role in the development of emergency plans and in the overall health response to disasters. They can enhance their understanding of local, State and national arrangements by participating in exercises and appropriate disaster medicine and emergency management courses. See Commentary, page 143.
Action for the Rights of Children (ARC) (2001). Foundations: Working with children: 84. This resource pack is intended to provide an introduction to the skills of working effectively with children: it does not aim to provide comprehensive training. It is strongly recommended that personnel who have a regular need to communicate with children, and particularly those who regularly work with distressed children should seek more specialised training in this field. The first three topics of this resource pack offer an introduction to the skills of communicating with children. Topics 4 and 5 examine strategies for promoting the well-being of children affected by conflict. Participatory exercises, case studies and overheads are provided. Facilitators are strongly recommended to develop regionally or country-specific materials such as case studies, in order to make the training even more relevant. (extracted from Introduction - RD)


A comprehensive group intervention with 124 children who experienced disaster-related trauma during a massive flood in Santa Fe, Argentina, in 2003 is illustrated, utilizing a one-session group eye movement desensitization and reprocessing (EMDR) protocol. A posttreatment session was done 3 months after the treatment intervention to evaluate results. Results of this one-session treatment procedure, utilizing the EMDR-Integrative Group Treatment Protocol, showed statistically significant reduction of symptoms immediately after the intervention. These statistically significant differences were sustained at posttreatment evaluation 3 months later, as measured by psychometric scales, and by clinical and behavioral observation. Data analysis also revealed significant gender differences. Despite methodological limitations, this study supports the efficacy of EMDR group treatment in the amelioration and prevention of posttraumatic stress disorder symptoms, providing an efficient, simple, and economic (in terms of time and resources) tool for disaster-related trauma.


This article describes a spontaneous project that emerged from a group of 3- and 4-year-old children in Louisiana after Hurricane Katrina. The article describes how the teachers adapted the classroom and curriculum to meet the diverse needs of children who were evacuees, as well as those children who were affected in other ways by the hurricanes--Katrina, then three weeks later, Rita. Photographs and other documentation chronicle children’s work and learning over the course of the project. Parents’ comments and teachers’ reflections are also included.


Abstract: This paper identifies the experience of the authors working in the field of humanitarian education in the last two decades. Important changes have been witnessed since the Central American crises of the seventies, the refugee focus of the eighties and the new UN vision of the complex emergency crisis of the nineties resulting from the post Cold War scenarios of humanitarian calamity. Using some selected case studies (Colombia, Northern Caucasus, Gujarat, India, Sierra Leone), the paper underlines the need for an integrated strategy of “child friendly spaces”. A central aspect of this strategy needs to address a humanitarian curriculum, where the concept of quality education needs to be reconsidered. The concept of quality in education in complex emergencies should ponder educational strategies able to provide the basic conditions for a rather sustainable process of support to a “healing school climate”. The support and logistics of basic elements for provision of a “healing school climate” are required, with the same emphasis given “as a matter of fact” to aspects concerning the cognitive domain. The emphasis on recreation and play and the development of related creative activities and expression are as important as the support and provision of reading, writing, numeracy and “life skills”. Sharpening the tools of planning implementation and hands-on field evaluation of a rapid response of
humanitarian education needs more effort and technical resources. More coordinating of field based training capacity for local educators should be orientated to that end, rather than the overstatement of general guidelines, international policy/strategy meetings and conferences.


The American Psychological Association-California Psychological Association Disaster Response Project provided valuable lessons about disaster response at the local and state levels. The authors offer guidelines from the experiences of pioneers of organized disaster response and from published accounts on how to set up disaster response networks, the necessary training to become a disaster response volunteer, and how to maintain a disaster response team (e.g., tools needed, psychologists' roles, cultural diversity, and interprofessional camaraderie). Also described are the following: interventions for stress responses from victims, helpers, and children; special problems of social disasters; implications of media presence; and psychologists' roles in educating the public and government agencies about disaster response. Finally, the future of disaster response in the mental health profession is discussed.


The article discusses the therapeutic properties of art, focusing on an art therapy program for children affected by the Pakistan earthquake of 2005. The authors believe that art therapy for children affected by disasters can help children communicate their feelings and help in the healing of emotional trauma. The healing properties of art as both a process and a product are discussed. The authors contend that the most important part in the training of lay counselors in art therapy is to ensure that they do not try to interpret the art work.


The objective of this paper is to develop a brief screening instrument of posttraumatic stress disorder (PTSD) for young victims of natural disasters. Data were derived from flood victims in 1998 and 1999 in Hunan, China. A representative population sample of 6,852 subjects 7-15 years of age was selected. Among them, 6,073 (88.6%) were interviewed. Multistage sampling was used to select the subjects and PTSD was ascertained with Diagnostic and Statistical Manual of Mental Disorders: 4th Edition (DSM-IV). We randomly assigned 80% (4,851) of the study subjects to construct the screening instrument (construct model) and the remaining 20% (1,222) subjects to examine the model (validation model). Logistic regression analysis and receiver operating characteristics curves were utilized to select a subset of symptoms and cutoff point from the pre-structured questionnaires. A seven-symptom instrument for PTSD screening was selected. Scores of 3 or more on this instrument were employed to define positive cases of PTSD with a sensitivity of 96.9%, specificity 99.0%, positive predictive value (PPV) 82.6%, and negative predictive value (NPV) 99.8%. The brief screening instrument developed in this study is highly valid, reliable, and predictable.


 Evaluated 90 child survivors (aged 15-48 mo) of the Armenian earthquake who were treated through a child psychotherapy center 6 mo after the disaster. Memory functioning and baseline clinical data are examined to develop a better understanding of diagnostic indicators and trauma processing in this population. Ss completed structured clinical interviews addressing diagnostic symptomatology and personal experiences associated with traumatization. 48 Ss showed the presence of a vivid memory and 81 Ss experienced some form of memory of the disaster. Nine Ss
received mild and 29 Ss received moderate trauma severity ratings. The case example of 2 sisters aged 2- and 4-yrs is included. Therapeutic effectiveness and other treatment considerations are discussed. The impact of natural disasters, including earthquakes, on child survivors may result in cognitive, behavioral, and somatic symptomatology consistent with posttraumatic stress disorder (PTSD).


This report reviews child-focused and child-led disaster risk reduction approaches and techniques. It documents a number of case studies across a range of interventions, dividing these into three main areas: Knowledge, Voice and Action. It makes some observations regarding current practice and recommendations that imply a shift in emphasis going forward. A variety of age groups and settings were utilised in the case studies to educate children and adults for disasters.


The aim of this paper is to describe the activities and observations of the team from National Institute of Mental Health and Neuro Sciences (NIMHANS) Bangalore, India in the Andaman and Nicobar Islands during the early phase of the Tsunami disaster in January and February 2005. The activities comprised mental health consultation at camps, community sensitization, mental health services to the students and children, teachers orientation sessions and training of non-governmental organization [NGO] functionaries. Initial assessment reveals 5-8% of the population were suffering from significant mental health problems following the early phase of the disaster. This may increase in the aftermath of the early relief phase. Psychiatric morbidity is expected be around 25-30% in the disillusionment phase. High resilience was seen in the joint family system of tribal Nicobarese during early phase of disaster. In developing countries like India, limited availability of mental health professionals and poor knowledge about disaster mental health among the medical and para-medical staff, may lead to poor psychosocial rehabilitation of the survivors. To respond to a high magnitude natural disaster like a tsunami, the disaster mental health team must be able to understand the local culture, traditions, language, belief systems and local livelihood patterns. They also need to integrate with the network of various governmental and non-governmental organizations to cater to the needs of the survivors. Hence the presence of a disaster mental health team is definitely required during the early phase of the disaster in developing countries.


After natural disasters, most children exhibit typical symptoms, which can be mitigated when parents and teachers provide emotional support and facilitate adaptive coping strategies. However, some children may experience clinical symptoms, which require professional counseling. This article guides family therapists in (a) identifying children's typical and clinical symptoms after a natural disaster, (b) training parents and teachers in basic interventions, and (c) implementing developmentally appropriate clinical interventions that integrate play. A multimodal, three-phase approach of Cognitive Behavior Therapy, Play Therapy, and Family Play Therapy is described.


Bioterrorism within the United States is a continuing threat. Because children and adolescents are among the most vulnerable populations during a bioterrorist attack, school counselors must be prepared with knowledge and skills. This article provides pertinent information including (a) a description of bioterrorism and biological agents, (b) the psychological impact of bioterrorism, (c) school counselors' role in a school-related incident, and (d) disaster mental health principles and procedures. Implications for school counselors are discussed in the context of the ASCA National Model.

The effects of stress on children's long-term memory for a major hurricane were studied. Stress was objectively defined as low, moderate, or high according to the severity of damage to the child's home. One hundred 3 and 4-year-old children received a structured interview 2-6 months following the hurricane. Older children recalled and elaborated more than younger children. Prompted recall was greater than spontaneous recall. There was a quadratic function, consistent with an inverted U-shaped curve, relating storm severity with overall as well as spontaneous recall. These findings can be applied to the effects of stress on the amount recalled by children giving retrospective accounts of temporally extended, naturalistic events.


In the context of post-disaster reconstruction, there is growing awareness of the need for more integrated inclusive processes that allow people to retake control of their lives, and that ensure practical responses to local conditions. Yet, a range of pressures and challenges conspire to make these approaches appear unworkable. "Participation" in this context, if it happens at all, is often cursory and superficial, whether it involves children or adults. This paper describes an attempt to respond to these challenges in one small community in Tamil Nadu, India, after the 2004 Indian Ocean tsunami. The scope for real involvement on the part of children and their families was limited by a number of factors, but in the end they were able to exercise some genuine control over the reconstruction of their homes and neighborhood. The paper discusses the replicability of this case, and argues for the importance of a process that includes children and adults together.


The objective of this handbook is to help organizations and communities to keep children in focus throughout a complex, demanding process. It is intended for child-focused organizations that are concerned with the protection of children in disaster response but are not accustomed to thinking in terms of shelter; and also for NGOs, local community-based organizations and contractors that are familiar with the issues of reconstruction, but that have not actually considered the implications for children in their planning and decision-making. It has been written with the construction of permanent housing and settlements in mind, but the principles discussed here would also be relevant for temporary housing. Ideally this handbook will also make it easier to explain to governments and donors, and even communities, why a more thoughtful, possibly more time consuming process, will lead to more desirable outcomes. (extracted from Summary RD)


The tsunami disaster in South Asia affected the mental health of thousands of survivors, but psychological aspects of rehabilitation are frequently overlooked in public health initiatives. From January to March 2005, teams from the National Institute of Mental Health and Neurosciences in Bangalore, India, traveled to south India and implemented a "train the trainer" community-based mental health program of psychosocial care to facilitate the recovery of child and adult survivors. Psychosocial care has applications to natural and manmade disasters in developing countries.


The article discusses events that cause what is called population-wide trauma (PWT) and how educators should deal with children who have experienced such events. The author offers the examples of the terrorist attacks on September 11, 2001 in New York City and Hurricane Katrina in New Orleans, Louisiana as examples of PWT. The author also discusses what teachers can expect and should expect from traumatized
kids, what to do if a PWT event takes place, and guidelines for both teachers and parents on how to best deal with children who have experienced PWT.


Bhushan, B. and J. S. Kumar (2007). "Emotional Distress and Posttraumatic Stress in Children Surviving The 2004 Tsunami." Journal of Loss & Trauma 12(3): 245-257. The Akkaraipettai village of the Nagapatinam district of Tamilnadu, India, was one of the areas most affected by the tsunami that hit the Indian Ocean on December 26, 2004. This study was conducted to assess the psychological effect of the tsunami on adolescents. The impact of the trauma was both measured and examined from a cultural perspective. The Impact of Event Scale, (IES), the Children's Revised Impact of Event Scale, (CRIES), and the Pediatric Emotional Distress Scale (PEDS) were administered to 130 subjects (69 boys and 61 girls). Results showed that the children measured high on posttraumatic stress and all three factors of the PEDS. Further, a sex difference was recorded, with females exhibiting more likelihood of trauma than males. Loss of family members significantly determined all of the factors of the IES and CRIES except intrusion.


Birmes, P., J.-P. Raynaud, et al. (2009). "Children's enduring PTSD symptoms are related to their family's adaptability and cohesion." Community Mental Health Journal 45(4): 290-299. This study compared, 18-24 months after an industrial disaster, in two groups of children (those with clinically relevant PTSD symptoms versus those with low PTSD symptoms), the child's perception of family cohesion and adaptability, the child's experience of the explosion, and parental characteristics. Enmeshed family cohesion or rigid family adaptability were more frequently found in children with low PTSD symptoms. PTSD symptoms in the mother, living in a family of 3 or more children, and being female were significantly associated with PTSD symptoms in the children. The assessment of traumatized children should include assessment of family's adaptability and cohesion.

Boer, F., C. Smit, et al. (2009). "Impact of a technological disaster on young children: A five-year postdisaster multi informant study." Journal of Traumatic Stress 22 (6): 516-524. Children exposed to a technological disaster during an understudied part of the lifespan, preschool age and early middle childhood, were assessed in a 5-year follow-up regarding mental health problems, anxiety disorder symptoms, depressive symptoms, physical symptoms, and posttraumatic stress symptoms. Exposed children and their parents (n = 264) reported significantly more problems than controls (n = 515). The differences were greater for conduct problems (including hyperactivity) and physical symptoms, than for anxiety and depression. The long-term effects of a technological disaster on children of pre-school age at exposure appear to differ from those in children, who were victimized at a later age. This may reflect interference with completion of specific developmental tasks.

The present study examined the prevalence and predictors of posttraumatic stress disorder symptoms (PTSD) in a sample of 533 students (aged 11 to 21), 28 months after the 1997 Flood in southwestern Poland. The results show that 18% of the participants met all diagnostic criteria for PTSD. Based on hierarchical multiple regression analyses, PTSD criteria symptoms were positively correlated with the degree of exposure to trauma experienced during the disaster. A three-way interaction of trauma, age, and gender showed that more PTSD symptoms were observed among the younger participants and girls than among the older boys. The results confirm the need of research testing culturally sensitive implementation of mental health programs for young victims of disasters, taking into account their age and gender.


The purpose of this study was to evaluate the role of family factors as predictors of posttraumatic stress disorder (PTSD) symptoms among adolescents, a substantial period of time after a natural disaster. It was hypothesized that a lack of parental support, family conflict, and overprotectiveness are all risk factors with regard to levels of PTSD symptoms. A group of 533 schoolchildren and high-school students was investigated 28 months after a huge flood, which was one of the most devastating disasters in Poland. The results of a hierarchical regression analysis indicate that the extent of traumatic exposure, parental support, family conflict, and overprotectiveness, all predicted levels of PTSD symptoms in the group investigated. Furthermore, parental overprotectiveness moderated the effect of trauma, thus augmenting the impact of stress experienced during the disaster on the level of PTSD symptoms. The findings suggest that excessive parental control and infantilization of children for a long time after a disaster are harmful for adolescents' health and could be an obstacle in the recovery process. The results highlight the importance of studying parental ways of coping in order to predict how adolescents cope with a traumatic event.


Young populations, and particularly young males, have been attributed a proclivity to aggression and unrest that puts societies at risk. Theories about the dangers of a demographic 'youth bulge' inform public and policy debates about the predictors of violent conflict, as evidenced most recently in the World Bank's World Development Report for 2007. This paper assesses the validity and utility of claims linking youth bulges to civil conflicts by reviewing different literatures concerning naturalist ideas of young humans' innate aggression and cognitive incompetence as well as environmentalist ideas of environmental stimuli, processes of socialisation, and the dialectical relationship of structural conditions and human agency. This review finds that the moral panic propagated by youth bulge theorists is too often based on only one form of influence on human development and action, whether an aspect of environment, personal experience, or individual traits. A more cogent analysis must integrate the highly complex and dynamic processes involved in cognition and behaviour and aim to develop theories that take account of the social power, ideational and structural forms, and emotional and cognitive processes that young people experience and draw on in times of war.


Stage 1: Secondary Research (November 2000– July 2001). A survey of the impacts of conflict on children in South Asia, undertaken by a team of researchers attached to the Refugee Studies Centre, University of Oxford, UK. This research was intended to identify existing information on war-affected and displaced children in the region as
well as organisations that are working on these issues. In addition, it facilitated the identification of questions, themes and field sites for the primary research to be conducted in Stage 2. The results of Stage 1 will be used also to establish priority areas for capacity-building and programmatic intervention, and key issues for policy and advocacy.

This discussion document is a summary of the trends and issues identified through the research conducted in Stage 1. It is a synthesis of eight country specific reports. Together these reports provide a review of existing information on war-affected children in Afghanistan, Sri Lanka, Pakistan, India, Nepal, Bhutan, Cox's Bazaar, Bangladesh and the Chittagong Hill Tracts, Bangladesh respectively. They contain analysis on both the macro conditions that contribute to political violence as well as the micro level impacts of these conflicts on children. They also point to knowledge gaps and methodological shortcomings, as well as to further information needs. The latter are summarised in the conclusion and recommendations to the present report.


Research on the effects of childhood trauma has been limited by the lack of a comprehensive, reliable, and valid instrument that assesses the occurrence of early traumatic experiences. This paper presents the development and preliminary psychometric properties of an instrument, the Early Trauma Inventory (ETI), for the assessment of reported childhood trauma. The clinician-administered ETI is a 56-item interview for the assessment of physical, emotional, and sexual abuse, as well as general traumatic experience (including items which range from parental loss to natural disaster). For each item of the ETI, frequency of abuse/trauma by developmental stage, onset and termination of abuse/trauma, perpetrator of the abuse/trauma, and impact on the individual are assessed. Initial analyses indicate acceptable inter-rater reliability, test-retest reliability, and internal consistency for the ETI. Comparisons between the ETI and other instruments for the assessment of trauma, as well as instruments for the measurement of symptoms related to abuse, such as dissociation and PTSD, demonstrated good convergent validity. Validity was also demonstrated based on the ability of the ETI to discriminate patients with PTSD from comparison subjects. Based on these findings, the ETI appears to be a reliable and valid instrument for the measurement of reported childhood trauma.


Based on the crisis that occurred on Tsolo, South Africa and the lack of attendance to the needs of the people there, concern and need for social policy provisions to provide for the welfare of the people is demanded. 35 children and 29 parents, all of whom were displaced by ongoing violence, were interviewed. Information received from these interviews revealed that only the basic needs of the people had been met. The inability of current social welfare policy to cope with similar crises is discussed along with strategies aimed at developing an appropriate disaster policy to more adequately meet the needs of the people, including the preparation of supplies and financial reserves.


Like everyone on the Gulf Coast, pregnant women were swept up in Hurricane Katrina. Women gave birth in the squalor of the Superdome or in alleys while waiting for rescuers. When it comes to pregnant women, the first priority of disaster relief agencies is to provide obstetrical and neonatal care. Massive relief efforts sometimes mean that access to care for pregnant women is actually improved in the aftermath of a disaster. Reproductive health is a priority in refugee camps. Improved maternal and child care has been observed during wars and has been suggested as a possible explanation of the unexpectedly good birth outcomes often found in wartime. Hurricanes can have a profound impact on life courses. Disasters produce a tremendous amount of psychological and physical stress. Breastfeeding is often deemphasized in the aftermath of a disaster, because donors may provide formula in
an effort to help. Mothers and medical personnel may not realize that most traumatized women still produce good-quality milk, although cases of stress-induced cessation of lactation were reported after the 1985 Mexico City earthquake. Overall, we know surprisingly little about the impact of hurricanes and other disasters on pregnancy, and this lack of knowledge hampers planning.

Camilleri, P., C. Healy, et al. (2007). Recovering from the Canberra 2003 bushfire: a work in progress. Watson, ACT, Australian Catholic University: 191. The literature on emergency management, community resilience and recovery is rapidly growing. However, as our review of the literature in the body of this report demonstrates, there are still considerable gaps in the literature concerning the nature of recovery, in particular the medium to long-term nature of recovery. Accordingly, the purpose of this research project has been to investigate the process of individual and community recovery from a natural disaster, looking particularly at the medium to long-term recovery process following the 2003 Canberra bushfire. Provides recommendations for community recovery.

Carr, A. (2004). "Interventions for post-traumatic stress disorder in children and adolescents." Pediatric Rehabilitation 7(4): 231-244. Clinical features, epidemiology and aetiology of post-traumatic stress disorder (PTSD) are outlined. Treatment outcome studies involving children with PTSD who have survived traumatic accidents, natural disasters and child sexual abuse are reviewed. An evidence-based assessment and treatment protocol is outlined for children and adolescents with PTSD. Key components of effective treatment are psycho-education about trauma reactions, sustained exposure to trauma-related cues and memories until habituation occurs, coping skills training for children to help them manage anxiety and parent training to equip parents with the skills to help them facilitate their children's recovery.

Catani, C., N. Jacob, et al. (2008). "Family violence, war, and natural disasters: A study of the effect of extreme stress on children's mental health in Sri Lanka." BMC Psychiatry 8(Special section): p1-10. The consequences of war violence and natural disasters on the mental health of children as well as on family dynamics remain poorly understood. Aim of the present investigation was to establish the prevalence and predictors of traumatic stress related to war, family violence and the recent Tsunami experience in children living in a region affected by a long-lasting violent conflict. In addition, the study looked at whether higher levels of war violence would be related to higher levels of violence within the family and whether this would result in higher rates of psychological problems in the affected children. Methods: 296 Tamil school children in Sri Lanka's North-Eastern provinces were randomly selected for the survey. Diagnostic interviews were carried out by extensively trained local Master level counselors. PTSD symptoms were established by means of a validated Tamil version of the UCLA PTSD Index. Additionally, participants completed a detailed checklist of event types related to organized and family violence. Results: 82.4% of the children had experienced at least one war-related event, 95.6% reported at least one aversive experience out of the family violence spectrum. The consequences are reflected in a 30.4% PTSD and a 19.6% Major Depression prevalence. Linear regression analyses showed that fathers' alcohol intake and previous exposure to war were significantly linked to the amount of maltreatment reported by the child. A clear dose-effect relationship between exposure to various stressful experiences and PTSD was found in the examined children. Conclusion: Data argue for a relationship between war violence and violent behavior inflicted on children in their families. Both of these factors, together with the experience of the recent Tsunami, resulted as significant predictors of PTSD in children, thus highlighting the detrimental effect that the experience of cumulative stress can have on children's mental health.

Background: The North-Eastern part of Sri Lanka had already been affected by civil war when the 2004 Tsunami wave hit the region, leading to high rates of posttraumatic stress disorder (PTSD) in children. In the acute aftermath of the Tsunami we tested the efficacy of two pragmatic short-term interventions when applied by trained local counselors. Methods: A randomized treatment comparison was implemented in a refugee camp in a severely affected community. 31 children who presented with a preliminary diagnosis of PTSD were randomly assigned either to six sessions Narrative Exposure Therapy for children (KIDNET) or six sessions of meditation-relaxation (MED-RELAX). Outcome measures included severity of PTSD symptoms, level of functioning and physical health. Results: In both treatment conditions, PTSD symptoms and impairment in functioning were significantly reduced at one month post-test and remained stable over time. At 6 months follow-up, recovery rates were 81% for the children in the KIDNET group and 71% for those in the MEDRELAX group. There was no significant difference between the two therapy groups in any outcome measure. Conclusion: As recovery rates in the treatment groups exceeded the expected rates of natural recovery, the study provides preliminary evidence for the effectiveness of NET as well as meditation-relaxation techniques when carried out by trained local counselors for the treatment of PTSD in children in the direct aftermath of mass disasters. Trial registration: ClinicalTrials.gov Identifier:NCT00820391


Examines the treatment of school children with disaster-related posttraumatic stress disorder (PTSD). Need for effective psychological intervention for disaster-related PTSD; Administration of Eye Movement Desensitization and Reprocessing therapy to children; Measurement of the Children's Reaction Inventory.


Examined the psychological impact of the September 11th disaster on the immediate neighborhood of the New York World Trade Center. 555 residents (aged 8-86 yrs) from the local Chinatown community participated in the study. Ss were surveyed retrospectively on their emotional distress immediately after the tragedy and 5 mo later. Prevalent anxiety was found in general community residents and additional depression in those who lost family members or friends. The mental health condition of the community improved tremendously 5 mo later, with the initial 59% of general residents having 4 or more emotional symptoms dropping to 17%. However, more than half of the community residents had persistently shown one or more symptoms of emotional distress. Those who had lost a family member or friend in the disaster showed significantly higher distress. 90% had 4 or more major psychiatric symptoms during the first few weeks right after the disaster, and the rate dropped to 35% 5 mo later. Overall, those in their 40s and 50s seemed to have had relatively higher emotional distress than both younger and older groups. Methodological limitations are discussed concerning retrospective reporting and sample characteristics.


The purpose of this study was to understand and describe the experiences of children following Hurricane Floyd and its ensuing flood. Narratives from 97 children ages 7-12 were gathered using an open-ended question included in the PTSD Child Interview (Fletcher, 1996). Qualitative analysis, guided by a phenomenological design, was conducted on the data. Six themes representing the children's perspectives of the hurricane experience emerged from the analysis: (a) escaping the flood, (b) destruction and damage to property, (c) inconvenience and restoration, (d) concern for self and other's safety, (e) recollection of place, time, and event, and (f) thankfulness. This study helps researchers and clinicians understand the merits of
gathering children’s perspectives useful toward supporting them and their families following a hurricane and/or flood event.

Cohen, J. A., L. H. Jaycox, et al. (2009). "Treating traumatized children after Hurricane Katrina: Project Fleur-de-lisTM." Clinical Child and Family Psychology Review 12(1): 55-64. Project Fleur-de-lisTM (PFDL) was established to provide a tiered approach to triage and treat children experiencing trauma symptoms after Hurricane Katrina. PFDL provides school screening in schools in New Orleans and three tiers of evidence-based treatment (EBT) to disaster-exposed children utilizing a public health approach to meet the various needs of students referred to the program, some stemming from the disaster itself, some related to prior exposure to violence, and some relating to preexisting conditions and educational delays. The National Institute of Mental Health (NIMH) is funding a research project conducted in collaboration with PFDL, to examine two evidence-based practices for child PTSD in order to guide child treatment decisions after future disaster situations. This article describes the need for mental health services for children following disaster, the structure and purpose of PFDL, design of the NIMH project, two case descriptions of children treated within the project, and preliminary lessons learned.

Cohen, J. A. and A. P. Mannarino (2008). "Trauma-Focused Cognitive Behavioural Therapy for Children and Parents." Child & Adolescent Mental Health 13(4): 158-162. Trauma-focused cognitive behavioural therapy (TF-CBT) for children and parents is an evidence based treatment approach for traumatised children. Evaluation of TF-CBT includes several randomised controlled trials, effectiveness studies and ongoing studies for children experiencing sexual abuse, domestic violence, traumatic grief, terrorism, disasters and multiple traumas. The model of TF-CBT described here is a flexible, components-based model that provides children and parents with stress management skills prior to encouraging direct discussion and processing of children’s traumatic experiences. TF-CBT components are summarised by the acronym PRACTICE: Psychoeducation, Parenting skills, Relaxation skills, Affective modulation skills, Cognitive coping skills, Trauma narrative and cognitive processing of the traumatic event(s), In vivo mastery of trauma reminders, Conjoint child-parent sessions, and Enhancing safety and future developmental trajectory. Currently this model of TF-CBT is being adapted and implemented both within the USA and internationally.

Committee on Environmental Health (2003). "Radiation Disasters and Children." Pediatrics 111(6): 1455. ABSTRACT. The special medical needs of children make it essential that pediatricians be prepared for radiation disasters, including 1) the detonation of a nuclear weapon; 2) a nuclear power plant event that unleashes a radioactive cloud; and 3) the dispersal of radionuclides by conventional explosive or the crash of a transport vehicle. Any of these events could occur unintentionally or as an act of terrorism. Nuclear facilities (eg, power plants, fuel processing centers, and food irradiation facilities) are often located in highly populated areas, and as they age, the risk of mechanical failure increases. The short-and long-term consequences of a radiation disaster are significantly greater in children for several reasons. First, children have a disproportionately higher minute ventilation, leading to greater internal exposure to radioactive gases. Children have a significantly greater risk of developing cancer even when they are exposed to radiation in utero. Finally, children and the parents of young children are more likely than are adults to develop enduring psychologic injury after a radiation disaster. The pediatrician has a critical role in planning for radiation disasters. For example, potassium iodide is of proven value for thyroid protection but must be given before or soon after exposure to radiiodines, requiring its placement in homes, schools, and child care centers. Pediatricians should work with public health authorities to ensure that children receive full consideration in local planning for a radiation disaster.

The book begins with an outline of the distressing statistics on the impacts of war on children and families. It reminds the reader that in the last 10 years around 2,000,000 children have been killed in wars, 6,000,000 mutilated, a further 1,000,000 orphaned, 12,000,000 displaced and left homeless and 10,000,000 marked by psychological scars. However, the introduction also makes it clear that although there are often not easy or quick solutions, this book’s aim is to provide research-based and practical suggestions that will help early childhood educators effectively to meet the needs of children and their carers while working to help build peace in their wider communities. Chapter 1 provides a summary of existing research on the impacts of armed conflict on young children. Children living in communities affected by war and armed conflict may face issues such as a loss of services including health and education provision, a reduction in physical safety and mental well-being. They may lose family members and friends and become refugees losing their home and community, financial security, culture and language. Clearly there are significant challenges to early years’ professionals in how best to support children and their families in these circumstances.

The next part of the book, written by different early childhood specialists working in countries around the world, provides first hand accounts of how some early years’ educators have begun to grapple with these issues. Chapters 2 to 9 are case studies from Albania, Bosnia and Herzegovina, Chad, Colombia, Nepal, Northern Ireland, Palestine and the USA.

(Extract from review by L Devereux http://ecl.sagepub.com/cgi/reprint/9/3/351)


Abstract. Childhood, in our culture, does not preclude exposure to trauma. Sexual abuse, physical abuse, natural disaster, urban violence, school violence, and terrorism result in significant numbers of children with posttraumatic stress disorder (PTSD) symptomatology. Many factors contribute to symptomatic expression, with some children showing few effects and others being unable to return to school. School psychologists should have a basic understanding of the impairing effects of PTSD, assessment tools, treatment options, and school reintegration planning. Specifically, this article explicates the prevalence and etiological factors related to PTSD. Assessment tools, therapeutic techniques, and school reintegration are discussed.


This exploratory qualitative study considers the subjective resettlement experiences of children forced into armed conflict in Northern Uganda from the perspectives of 11 former child combatants and 11 adult community members. A thematic analysis was performed on the narrative data. The bioecological model was used to provide a conceptual framework for key themes. Major findings included the overarching impact of ongoing armed conflict on returnees’ lives, the important role of the family in supporting children’s resettlement, the harassment of former child soldiers by community members, and the community’s inability to support systematically the returning children in tangible ways. This study recommends that humanitarian services at all levels strengthen the capacity of families to care for the material and psychoemotional needs of former child soldiers within their communities.


This study extends L. G. Calhoun and R. G. Tedeschi’s (1996) model of posttraumatic growth (PTG), positive change resulting from the struggle with trauma, to children by exploring the construct among youngsters who experienced Hurricane Floyd and the subsequent flooding. Despite burgeoning interest in PTG, few studies have examined the phenomenon among non-adults. This first systematic study of PTG in children explores hypothesized linkages among PTG and social support, competency beliefs, and ruminative thinking. Results suggest that competency beliefs relate to PTG and that a supportive social environment and ruminative thinking are associated with positive competency beliefs. Contrary to expectations, social support did not relate to
rumination. Findings testify to the merit of studying the PTG process in children. Clinical implications and future directions are considered.

Cuninghame, C., T. Hyder, et al. (2001). Guidelines for early childhood development programmes in conflicts and emergencies in The Balkans, Save the Children: 57. This guide has been written to support Save the Children UK’s (SC UK’s) “Emergency Preparedness Plan for the Balkans”, which covers Early Childhood Development (ECD) activities in emergency situations. We believe the guide is relevant to anyone wishing to set up ECD programmes for families currently, or recently, involved in armed conflict and emergency situations. This includes international agencies, peacekeeping forces and practitioners and students of ECD. This booklet is intended to remedy that gap by listing important points to keep in mind. Where relevant, we have printed items - such as the checklist of minimum standards, details of each standard, emergency kit lists, etc - on individual pages (or double-page spreads) so that you can photocopy and distribute them as appropriate. (from Introduction - RD)


Only recently has the mental health community recognized the applicability of diagnostic criteria for posttraumatic stress disorder (PTSD) in children and adolescents, including a consideration of specific age-related features. This paper provides a current review of the literature on PTSD pertaining to children and adolescents. Following a discussion of issues on diagnostic criteria and assessment of this affective disorder in this population, there is an overview of the existing literature on prevalence, comorbidity, risk factors, parental and family factors, and issues of gender and age of onset. The remainder of the paper focuses on the range of traumatic stressors in children and adolescents that can result in PTSD, including natural or human disasters, war and violence, chronic or life-threatening medical conditions, community violence and the witnessing of traumatic events, and physical and/or sexual abuse and other forms of interpersonal violence. Throughout the paper, there is an emphasis on the importance of considering developmental factors. Finally, implications of the existing literature for future areas of research are addressed.


Geoscience Australia and NATSEM have recently collaborated to produce experimental estimates of the geographic distribution of vulnerability to a natural hazard. Geoscience Australia (GA) has devised a methodology to quantify community impacts of natural hazards. NATSEM has used its synthetic estimation techniques to produce estimates of vulnerability to flood in 224 Census Collection Districts in Perth. GA’s methodology comprises four stages: indicator selection, a risk perception questionnaire, a decision tree analysis and a case study. This paper is about the fourth step, in which NATSEM was involved. An assessment of the estimates of vulnerability and the role of synthetic estimation must be done in the context of the preceding steps in the four-stage methodology. Due to the issues identified, we see the synthetic vulnerability outputs as powerful examples of the kind of small area data that can be produced using synthetic estimation rather than as authoritative final estimates of vulnerability in their own right.


In order to offer psychosocial support for children and adolescents in the Darfur refugee camps, UNICEF established a large number of so-called Child Friendly Spaces. This article describes a training for model animators, who later gave an on-the-job training to the animators in the facilities. This had a substantial effect on the quality of the support the animators offered to the children.

The consequences of Hurricane Katrina have far-reaching implications for the mental health system in the Gulf Coast region, with some of the most vulnerable survivors being children and adolescents. School-based services have been proposed as an ideal way to provide care; however, significant challenges remain in providing trauma-informed services in schools postdisaster. The authors discuss the consultation and training activities of the Los Angeles Unified School District Trauma Services Adaptation Center for Schools and Communities following Hurricane Katrina. Issues related to the dissemination of evidence-based treatment in schools following a disaster are discussed, as are the particular needs of providers and school staff and the importance of community collaboration in identifying ways to adapt implementation strategies for specific communities.


Applies cognitive developmental theory to explain how preschoolers, school-age children and adolescents process and respond to disasters. Preschool child's response to disaster; Symptoms that signal difficulties in coping; Intervention strategies.


The NSW Health Disaster Preparedness Strategic Education Framework 2008-2011 is a guide for the implementation of health disaster preparedness and education for NSW Health.


This study examines factors related to helpseeking among New York City parents on behalf of their young children after the September 11th terrorist attacks. Data were gathered from 180 parents about their children (under age 5) through in-depth parent interviews 9-12 months postdisaster. Parents were asked to describe their children's disaster-related experiences, their own and their children's mental health status, and post-9/11 helpseeking behavior for their children. Predictors of parental helpseeking for children's services included the emergence of new fears in children since 9/11, parent symptoms of depression, and parents' own helpseeking. The strongest predictor was children's direct exposure to the attacks. Fifteen percent (n = 27) of parents sought services for their very young children. Findings suggest that following 9/11, a familial orientation to helpseeking combined with children's specific disaster-related experiences may provide a basis for seeking services for young children, rather than children's apparent mental health status.


Details a study on stressors in Puerto Rican children as a result of Hurricane Georges in 1998. Types of stressors; Recommended cultural appropriate approaches; Acculturation and acculturative stress; Number of children of emigrant workers from the United States; Childrens' lack of previous experience with major natural disasters; Priorities in helping recent arrivals to Puerto Rico after Hurricane Georges.


Objective: The aims of this study were to examine health problems of children (4-12 years old at the time of the disaster) and adolescents (13-18 years old at the time of the disaster) before and after exposure to a fireworks disaster in the Netherlands (May 2000), to compare these health problems with a control group, and to identify risk factors for postdisaster psychological problems. Method: Because the electronic
medical records of family practitioners were used, longitudinal monitoring of health problems from 1 year predisaster until 2 years postdisaster for both victims (N = 1,628) and controls (N = 2,856) was possible. Health problems were classified according to the International Classification of Primary Care. Results: Postdisaster increases were significantly larger in victims than in controls for psychological problems, musculoskeletal problems, stress reactions, and symptoms of the extremities. Children 4-12 years old presented larger increases in sleep problems compared with controls, whereas children 13-18 years old showed larger increases in anxiety problems than their controls. Significant predictors for postdisaster psychological problems included being relocated, presenting predisaster psychological problems, and a low to medium socioeconomic status. Conclusions: Children and adolescents exposed to a disaster are at risk of long-lasting increases in both psychological and physical health problems. Postdisaster interventions should focus on those who were relocated and presented predisaster psychological problems.


In the summer of 2005, Hurricane Katrina displaced residents from the city of New Orleans and the eastern coastal area of Louisiana, and a month later, Hurricane Rita displaced many residents from the western coastal areas of Louisiana. The middle coastal area of Louisiana served as refuge for many evacuees, and a unique story documenting the health care provided to children emerged from the School-Based Health Center (SBHC) of St. Martin Parish. Quarterly reports filed by the program with the Louisiana Office of Public Health for the 2004-05 and 2005-06 school years document an increase in visits and the cost of care provided. Qualitative data document the clinics’ experiences responding to the evacuee children and their families. Among the lessons learned was that the presence of a SBHC facilitated the evacuees’ transitions and was an integral part of the community response to displaced students and their families.


The article explores the way in which Iranian children were affected by grief after being uprooted and having experienced the loss of family members, their homes and communities. Lack of access to information about what had happened to their immediate family members and uncertainty concerning the future were the most important expressed worries.


In August 2005 Hurricane Katrina hit the Louisiana and Mississippi Gulf Coast Regions. Throughout history, mental health professionals have primarily focused on adults as the identified victims of natural disasters. More recently, mental health professionals are focused on integrating mental health services to children and adolescents. This article discusses the impact natural disasters have on children, and the related traumatic stress response and post traumatic stress disorder often experienced by children. Treating children can be complicated and a developmentally appropriate intervention is needed. Evidenced-based research has shown play therapy to be a developmentally effective intervention with traumatised children. This article presents two case studies of play therapy with children affected by Hurricane Katrina.


The present study was designed to evaluate the effects on children (age: M = 5.5 years) in war-torn Bosnia and Herzegovina of a psychosocial intervention program consisting of weekly group meetings for mothers for 5 months. An additional aim was to investigate the children's psychosocial functioning and the mental health of their mothers. Internally displaced mother-child dyads were randomly assigned to an
intervention group receiving psychosocial support and basic medical care (n =42) or to a control group receiving medical care only (n =45). Participants took part in interviews and tests to provide information about war exposure, mental health, psychosocial functioning, intellectual abilities, and physical health. Results showed that although all participants were exposed to severe trauma, their manifestations of distress varied considerably. The intervention program had a positive effect on mothers’ mental health, children’s weight gain, and several measures of children’s psychosocial functioning and mental health, whereas there was no difference between the two groups on other measures. The findings have implications for policy.


Objective. PTSD and major depression occur frequently following traumatic exposure, both as separate disorders and concurrently. Although much of Turkey is under threat of severe earthquakes, risk factors for developing psychiatric disorders among Turkish children have not yet been studied. The aim of the study was to examine risk factors for PTSD and depression development in children. Method. A total of 160 survivors (102 girls and 58 boys) severely impacted by Turkey's 7.4-magnitude quake participated in a psychiatric interview 6-20 weeks after the disaster. The mean age was 14.43. Logistic regression was used to test effects of pre-disaster, disaster-related and post-disaster factors on diagnoses, yielding odds ratios (OR). Results. CAPS indicated that 96 (60%) had PTSD, and psychiatric interview found 49 (31%) with depression. Children diagnosed with PTSD were more likely to have witnessed death (OR=2.47) and experienced an extreme parental reaction (OR=3.45). Children with depression were more likely to be male (OR=4.48), have a higher trait anxiety score (OR=1.12 for every additional point), sustain injury (OR=4.29), and have lost a family member in the quake (OR=10.96). Focusing on the 96 children with PTSD, those with comorbid depression were more likely male, have a higher trait anxiety score, and have lost of family member. Conclusions. Mental health professionals should offer support to children witnessing death or losing a family member in a disaster. The ability of the family to remain calm and reassuring also may be a key factor in preventing PTSD.


Case histories of five earthquake survivors are presented. One girl and four boys aged 10-15 were interviewed 2 days to 8 weeks following a devastating 7.4 earthquake in Istanbul, Turkey. At initial assessment, all met criteria for PTSD with major depressive and anxiety symptoms. Two children experienced vivid intrusive voices, one experienced smells, and two experienced vivid images that lasted 2-4 months. Upon follow-up 20 months after the quake, two adolescents were fully recovered; partial PTSD and moderate depression were present in two children who were bereaved and were placed in a boarding school. Disastrous episodes at schools and in communities require early responses from child psychiatrists and psychologists.


Abstract: Emergency and disaster management in Australia is gradually moving towards a prevention-oriented focus that involves working with rather than on local communities. Such an approach, now frequently employed through the nationally endorsed framework of emergency risk management (ERM), involves the consideration of "vulnerability" of individuals and communities. This paper focuses on emergency management in remote indigenous communities to illustrate how the conceptualisation and application of the concept of vulnerability is bound with our attitudes to, and understanding of these communities. It is argued that the uncritical application of the concept of vulnerability to indigenous communities will do little to build communities that are more resilient and better able to manage disasters and emergencies. The paper suggests that a focus on local understandings of risk, local knowledge of hazards and coping strategies is critical for the development of safer,
sustainable communities. This will involve re-examining the role of emergency managers and the applicability of mainstream emergency management practices in indigenous communities. The paper concludes that emergency management must learn from critiques of dominant development strategies by accepting the value of existing capacities in indigenous communities and working towards relationships and processes that apply new strategies and ways of working.


A vast array of literature is available on generic approaches and methodologies of community development. The aim of these Guidelines is not to compete with or repeat information which may already be available, but rather to consider the way in which a community development approach can best be utilised to enhance the process of disaster recovery.

Given that a community development approach is critical to effective community recovery from a disaster these Guidelines aim to inform the full range of government departments, agencies and individuals likely to be involved in the disaster recovery process. However, it is also essential that individuals and agencies responsible for community development activities and initiatives be aware of the broader recovery system in which they operate, and integrate within it. These Guidelines offer a range of practical information in a number of specific areas, including:

- Desired outcomes for community development in the disaster context,
- Indicators of need to identify when it may be appropriate to resource and promote community development activity,
- Funding and employment of community development officers,
- Management and support of community development officers, and
- A range of specific initiatives and activities which may be appropriate to community development work in a disaster context.

Index to entire range of EMA manuals contained.


This paper explores the experiences of Honduran migrant children in New Orleans in the aftermath of Hurricane Katrina. Some had migrated to this city after Hurricane Mitch devastated their already poverty-stricken country in 1998, but many of them were forced to relocate again after Katrina. Many others have only recently arrived in New Orleans to join relatives attracted by the construction boom that followed the disaster. Based on ethnographic fieldwork in Honduras and New Orleans, I examine the contribution of these young migrants to their families’ survival strategies, including their participation in post-disaster reconstruction work. Findings counter dominant frameworks that pathologize the experience of disaster survivors, assuming their responses to be maladaptive, and conceptualize children as passive, dependent victims. Instead, I argue for a holistic approach that places young displacees in the broader context of the cultural and socioeconomic factors that prefigured the catastrophe and examines children’s resilience, not just their vulnerability.


Disasters occur not only in war and conflict or after natural events, such as earthquakes or floods. In fact, the death of hundreds of thousands of children in Niger every year, often for treatable conditions, could just as well qualify as a disaster situation. A lack of funding for health care and health-care staff and user fee policies for health care in very poor or unstable settings challenge international agreements that make statements about the right to health and access to health care for all people. This paper argues that although sustainable development is important, today many are without essential health care and die in the silent disasters of hunger and poverty. In other words, the development of health care appears to be stalled for the sake of sustainability.

Guide to how to work with children involved in and/or affected by organized violence, in order to provide them with the best possible early childhood experiences. Examines the impact of armed violence on children, principles for working with them in an educational/care context and provides specific programming guidelines and activities. (RD)


Worldwide children are impacted by natural disasters, including hurricanes, floods, tornadoes, earthquakes, wildfires, landslides and sandstorms, winter and severe storms, heat waves, volcanoes and tsunamis. School psychologists should understand natural disaster effects, such as economic loss, relocation and health concerns and mental health issues. While most children are able to cope, a significant minority develops severe symptoms and Post Traumatic Stress Disorder (PTSD). School psychologists should gain trauma mental health training through the American Psychological Association, the National Association of School Psychologists, and the International School Psychology Association. They can also be involved in school and community prevention, mitigation and educational programming. This article presents an overview for school psychologists of the literature on children in natural disasters.


Children served by school psychologists are frequently impacted by natural disasters. In the United States, tornadoes are a particular threat but have been studied very little. The current investigation developed a scale for assessing posttraumatic stress disorder (PTSD) in children in Kindergarten to Grade 6 impacted by a severe tornado. Six factors were found: Avoidance, Re-experiencing, Interpersonal Alienation, Interference with Daily Functioning, Physical Symptoms/Anxiety, and Foreshortened Future. Prevalence rates for PTSD symptomology ranged from 34 to 44% for factor scores and 41% for meeting all three Diagnostic and Statistical Manual of Mental Disorder, fourth edition-text revision (DSM-IV-TR; American Psychiatric Association, 2000) criteria; 40% indicated no symptoms. Children's fear during the tornado and damage to their school were related to many factor scores.


Objective. The objectives of this study were to describe the prevalence of counseling services, contrasted with the need after the terrorist attacks of September 11, 2001, the types of counseling received, and the predictors of receipt of counseling services. Methods. A cross-sectional, random-digit-dial survey was conducted in New York City (NYC) of parents (N = 434) of children who were 4 to 17 years of age 4 months after the September 11th terrorist attacks on the World Trade Center. Results. Overall, 10% of NYC children received some type of counseling after the September 11th attacks, according to parental report. Among these, 44% received counseling in schools, 36% received counseling from medical or professional providers, and 20% received counseling from other sources. However, only 27% of the children who had severe/very severe posttraumatic stress reactions (PTSR) after the attacks received counseling services. In a multivariate model, receipt of counseling before the September 11th attacks (odds ratio: 4.44) and having severe/very severe PTSD (odds ratio: 3.59) were the most important predictors of use of counseling services after the September 11th attacks. Minority status and having a parent who experienced the loss of a friend or a relative were also associated with receipt of services. Conclusions. There was substantial disparity between apparent need (as indicated by severe/very severe PTSD) for and receipt of mental health services for
children after the September 11th attacks. There is need for intensified efforts to identify, refer, and treat children in need, especially for children who are not already in a therapeutic relationship. An enhanced role for pediatricians is indicated. Pediatrics 2004;113:1367--1374; post-traumatic stress reactions, children, disaster, trauma.

Art has been considered to be a valuable therapeutic tool with children and adolescents who are experiencing grief. This article explores the use of art within the context of group bereavement counseling. The literatures concerning the effectiveness of grief groups and the use of art therapy with children are reviewed, and a case study of a school-based art group for bereaved youth is presented.

Children who experienced a highly stressful natural disaster, Hurricane Andrew, were interviewed within a few months of the event, when they were 3-4 years old, and again 6 years later, when they were 9-10 years old. Children were grouped into low, moderate, or high stress groups depending on the severity of the experienced storm. All children were able to recall this event in vivid detail 6 years later. In fact, children reported over twice as many propositions at the second interview as at the first. At the initial interview, children in the high stress group reported less information than children in the moderate stress group, but 6 years later, children in all three stress groups reported similar amounts of information. However, children in the high stress group needed more questions and prompts than children in the other stress groups. Yet children in the high stress group also reported more consistent information between the two interviews, especially about the storm, than children in the other stress groups. Implications for children's developing memory of stressful events are discussed.

Describes the process of assessment, intervention and evaluation undertaken with refugees in Mozambique in 1994, to address their psychosocial needs. Ch 1-3 describes the refugees experiences, the refugee settlement and present research results on the impact of traumatic experiences. Ch 4-10 provides detailed information and guidelines on the development and implementation of the program which was community based and community owned. It was a three part intervention of sensitization, work in the schools and work in the villages. The final chapter makes conclusions and recommendations. Appendices provide outlines of training sessions for interviewers and teachers.

The intent here is to offer a glimpse of the scope and nature of disasters, both man-made and natural, and their profound effects on children's physical and emotional health; to offer a fleeting view of the strength, resiliency, and coping behaviors of children subjected to such events; and to explore how affected children are helped through the intervention of adults and the natural coping mechanisms of play, work, and the creative arts. The personal accounts of overcoming major disasters and lesser misfortunes recounted here serve to reveal the profound therapeutic powers of spontaneous play and meaningful work, and how skilled and charitable adults can sustain and heal children and help bring them joy. (Extracted paragraph from article).

This paper is part of an investigation into 11-year-old students' interpretations of events in the environment. In particular, we analyse the use of a scale model constructed and manipulated by students when simulating a forest fire. We consider that their explanations involve the interrelation of three levels of organisation: the level at which the phenomenon is observed, a lower level at which causal
mechanisms are identified, and a higher level in which environmental constraints are identified. The data consisted of recordings of conversations in class and the students' explanations themselves. These were analysed under three headings: 1. The organisational level of the explanation; 2. The source of the evidence (original observations, the scale model, previous experiences or authorities); and 3. Who promotes the explanation (teacher, student or in interaction). The results show a spiral process of explanation construction. The use of the scale model encourages the inclusion of constraints in the explanations, while mechanisms are mostly introduced when resorting to previous experiences and observations. Scientific language is used mostly regarding mechanisms, and the integration of levels is encouraged by questions posed by the teacher.

   The authors discuss the potential of the arts and children's literature in particular in addressing the emotional needs of children exposed to disasters and conflict.
   (Annotation by R Dunn)
   NOTE: Annotated bibliography of children's literature by Gangi also in same journal.)

   ... there are some intersections between the victims of Katrina and the educational responses to them, and some of the primary constituent groups and issues that multicultural education represents and intends to serve. These are children of color and poverty who are marginalized in schools relative to resource allocation, learning opportunity, and academic achievement. Unfortunately, the lessons learned from the educational responses prompted by the aftermath of Katrina are not nearly as positive as we would hope. Nor are they the kinds of attitudes and actions that are most desirable or should be pursued in the long run if educators expect to produce positive effects for the children of Katrina beyond immediate reactions. Several of these lessons learned are suggested here for critical analysis, reflection, and reconstruction to generate better educational opportunities and outcomes for ethnically, racially, and culturally different students regardless of their specific circumstances at any particular point in time. These include the infeasibility of charity as pedagogy; the limitations of good intentions; the pernicious nature of racism; isolation and invisibility; and the certainty that some children are always left behind.
   (EXTRACT FROM OPENING PARAGRAPHS - R DUNN)

   The authors evaluated the impact of a "training the trainers" course for helping Sri Lankan tsunami-survivor children on education and mental health disaster volunteers. Sixty-two disaster volunteers were randomly assigned to either a school-based (ERASE Stress) "training the trainers" course or to an alternative "befriending" program that served as a control group. Participants in the ERASE Stress course significantly improved their perception of self-efficacy as tsunami survivors' helpers (Disaster-Helper Self-Efficacy Scale), self-mastery (Mastery scale), and optimism about their personal future (item from the Children's Future Orientation Scale). In addition, the perceived ability to use cognitive coping strategies (Cognitive Emotion Regulation Questionnaire) such as refocusing on planning, positive reappraisal, and putting the trauma into perspective was enhanced. The ERASE Stress course may be an effective method for strengthening local community capacity to deal with trauma survivors in developing countries.

   This annotated resource list includes information on agencies and organizations around the world that help children prepare for, respond to, and recover from natural and human-made disasters; descriptions of educational materials and other
resources aimed at informing children and youth about disasters; references to books written for children and youth about disasters; references to reports and books on children's experiences in disasters; and a summary of electronic mailing lists established to connect those concerned with child and youth disaster risk reduction, education, and protection. The list does not include references to peer-reviewed journal articles on the topic of children and disasters and is limited to resources published in English. (extracted from article - RD)

In recent times, Australian children have been exposed to a range of frightening images of war and terrorism in the media. To determine the possible impact of such distal events, fears were measured in a sample of 220 children aged 6 to 12 years using the Fear Survey Schedule for Children (FSSC-R) as well as a free option method. On the FSSC-R, the type and intensity of children's fears were similar to previous studies conducted over the past two decades, with being hit by a car, bombs and being unable to breathe producing the most fear. By contrast, spontaneous responses indicated that children's greatest fear was of animals. Surprisingly few children mentioned war and terrorism without prompting. The findings suggest that concerns about Australian children becoming more fearful as a result of media coverage of war and terrorism are not supported.

Discusses the psychosocial consequences of disasters. Emergence of post-traumatic stress disorder; Response to trauma; Psychosocial effects of disasters in children; Psychosocial rehabilitation.

The article discusses the role of aid workers and agencies towards devastated children in disaster. The aid work is not concerned with saving lives and livelihoods, but also with protecting and supporting the dignity of people. One of the aid organization Save the Children, has helped a child named Zuriash in Ethiopia. The organization met Zuriash and her father Hassan Andage in August, 1999, when they were learning to walk again after eating a toxic plant that causes paralysis. They were aware that the pulse, called vetch, could be poisonous, but it was one of the few edible plants that survived the drought, and they were desperately hungry. The organization provided food several population groups in the highlands and extra food and medical cart to malnourished children. They also monitored the nutritional to ensure their programmes remain effective, and had set up portable food warehouses in remote areas. Much of this effort centres on supporting the livestock economy through restocking of animal herds for families who have sold or lost livestock in the drought, and training of animal-health workers to undertake basic low-cost veterinary care.


This article reports on severe child undernutrition in non-emergency settings. Catastrophes, such as the Indian Ocean tsunami of 2004, often stir generous pledges of assistance. Public attention tends to gravitate towards conflicts and natural disasters. However, the purpose of this article is to address the more than five million children who die every year from causes linked directly and indirectly to undernutrition in developing countries, most of which can not be linked to naturals disasters or military conflicts.

Reports the establishment of the International Resilience Research Project for children affected by natural disasters. Objectives of the project; Ways to promote resilience factors and behaviors; Number of children and families participating in the project


This study examined a stratified random sample of 233 Kuwaiti 8- to 12-year-old boys and girls, in order to assess their level of exposure to violence during the Iraqi occupation of Kuwait and its relation to psychological and cognitive performance 1 year after the crisis. Children were assessed on intelligence, posttraumatic stress, and depression, and were interviewed about their crisis experience. No significant decline in intelligence scores was detected after the crisis. A difference in level of parental depression was found between those who stayed in Kuwait as compared to those who were out for all or part of the crisis. Depression in children was low but associated with the level of exposure to violence as reported in the interview, and greater levels of posttraumatic stress. The results support the hypothesis that acute trauma resulting from exposure to violence is related to posttraumatic stress in children.


During and after disasters, pediatricians can assist parents and community leaders not only by accommodating the unique needs of children but also by being cognizant of the psychological responses of children to reduce the possibility of long-term psychological morbidity. The effects of disaster on children are mediated by many factors including personal experience, parental reaction, developmental competency, gender, and the stage of disaster response. Pediatricians can be effective advocates for the child and family and at the community level and can affect national policy in support of families. In this report, specific children's responses are delineated, risk factors for adverse reactions are discussed, and advice is given for pediatricians to ameliorate the effects of disaster on children.


In this article, we present and illustrate cognitive-behavioral therapy for postdisaster distress. The treatment is for individuals who show more than normal transient stress after disaster and functions as an intermediate step between traditional crisis counseling and longer-term mental health treatments. Thus, it is one part of a larger mental health disaster response and is designed to be implemented no sooner than 60 days post disaster. A clinical case demonstrates its process and technique in a community practice setting.


Assessed the long-term mental health effects of the nuclear accident at Chernobyl. Two adult population samples (N=3,044), one from the Gomel region, close to the accident site, and one from Tver, 500 miles away, were studied 6 and one-half years after the event with the use of a variety of self-report questionnaires and a standardized psychiatric interview. The prevalence of psychological distress and Diagnostic and Statistical Manual of Mental Disorders-III-Revised (DSM-III-R) psychiatric disorders was exceptionally high in both regions. Scores on the self-report scales were consistently higher in the exposed region; however, a higher risk of DSM-III-R psychiatric disorders could be demonstrated only among women with children under 18 yrs of age in the exposed region. A substantial long-term mental health effect of the Chernobyl incident was demonstrated, mainly at a subclinical level.

During and following natural or man-made disasters, relief efforts have a long history of initially focusing on basic survival needs, then restoring community stability. Disaster mental health is a relatively new aspect of relief efforts, particularly in regard to children's needs. After reviewing objectives of major relief organizations and summarizing current research in light of practitioners' input, suggestions and resources are offered to strengthen cultural sensitivity in school-based disaster mental health services.


Many children have struggled to cope with the traumatic experiences brought about by hurricanes Katrina and Rita. This article recounts how the authors intervened in the lives of children and families after the storms.


The aim of this study is to evaluate the contribution that creative arts can play in promoting positive mental health and well-being. The research is based on a case study of an innovative art therapy programme delivered by a community-based mental health organisation in Northern Ireland, as part of a supported recovery programme. The study reported here explored the experiences and perceptions of the service users through in-depth interviews and focus groups. The art as therapy course was credited with improvements in self-esteem and self-confidence. It provided a safe space for reflection on mental health issues. Participants described the programme as cathartic and a springboard for engagement in a wide range of further projects. It is concluded that this type of project which addresses mental health issues in a supportive, positive, non-clinical environment can encourage and facilitate empowerment and recovery through accessible creative programmes. However, to date these programmes are time-limited, small-scale and marginal to the approach adopted by statutory service providers.


Should mental health practitioners expect lasting posttraumatic stress symptoms in the general population after future terrorist attacks or other disasters? Serendipitous random assignment of families allowed assessment of the effects of the September 11, 2001, terrorist attacks on parent and child trauma-related symptoms and parenting. Surprisingly, there were no differences between pre- and post-September 11 groups on measures of parent and child anxiety, depression, and feelings of safety. However, levels of parental monitoring and beliefs about family were higher in the group assessed after September 11, 2001. Implications for practitioners' responses to terrorism and disaster are discussed.


Description of the effects of armed conflict, personal loss through death and displacement on children. The expression of trauma in different age groups is briefly described. (RD)


Given the devastation caused by disasters and mass violence, it is critical that intervention policy be based on the most updated research findings. However, to date, no evidence-based consensus has been reached supporting a clear set of recommendations for intervention during the immediate and the mid-term post mass
trauma phases. Because it is unlikely that there will be evidence in the near or mid-
term future from clinical trials that cover the diversity of disaster and mass violence
circumstances, we assembled a worldwide panel of experts on the study and
treatment of those exposed to disaster and mass violence to extrapolate from related
fields of research, and to gain consensus on intervention principles. We identified five
empirically supported intervention principles that should be used to guide and inform
intervention and prevention efforts at the early to mid-term stages. These are
promoting: 1) a sense of safety, 2) calming, 3) a sense of self- and community
efficacy, 4) connectedness, and 5) hope.

considerations for posttraumatic stress disorder." Depression and Anxiety 24(2): 139-152.
The growing recognition and occurrence of traumatic exposure in the general
population has given increased salience to the need to understand the concept of
resilience. More than just the flip side of a risk factor, the notion of resilience
encompasses psychological and biological characteristics, intrinsic to an individual,
that might be modifiable and that confer protection against the development of
psychopathology in the face of stress. In this review, we provide some perspective on
the concept of resilience by examining early use of the term in research on children at
risk and discuss the relationship between risk and resilience factors. We then review
psychological and biological factors that may confer resilience to the development of
posttraumatic stress disorder (PTSD) following trauma, examine how resilience has
been assessed and measured, and discuss issues to be addressed in furthering our
understanding of this critical concept going forward.

community art therapy group." International Journal of Art Therapy: Formerly Inscape 11(2):
69 - 78.
The paper is essentially a description of a field study bringing an ethnographic and
participative approach to the exploration of a small, community art therapy group in
which mothers and their young children paint together. Parent-infant psychotherapy;
the importance of attunement and attachment between infant and caregiver; the
intersubjective world of the infant and how the art-making process can enhance this,
form the framework for the research. The ideas of Stern and Trevarthen on vitality
and "vitality affects" and Stern's concept of "now moments" are important to the
study. Videotapes showing the interaction of six mothers and their infants as they
painted together were reviewed with the participants and this in turn was recorded.
These were analysed using Macleod. The findings show how painting with each other
draws the mother and child together emotionally and positively affects their
relationship. They also reveal the importance of colour; the significance of containing
mess and chaos; and the symbolic meaning of the paintings in this context. It has
potential for the art therapist as a sensitive therapeutic tool in working with the
relationships of mothers and young children using art materials. The paper concludes
that the creative, sensuous activity of painting experienced together by the mothers
and young children promotes new and positive connections.

Discusses the meaning of "difficult circumstances" and the specific symptoms of
PTSD in children in the context of war in Palestine and Iraq. Summarises the
considerations that must be taken into account when addressing the needs of people
in disaster and emergency situations. (RD)

Hoven, C. W., C. S. Duarte, et al. (2004). "Exposure to Trauma and Separation Anxiety in
The impact of exposure to the World Trade Center attack on children presenting
separation anxiety disorder (SAD) 6 months after the attack was studied in a
representative sample of New York City public school students (N = 8,236). Probable
SAD occurred in 12.3% of the sample and was more frequent in girls, young children,
and children who previously had been exposed to traumatic situations. Probable SAD
was highly comorbid with probable posttraumatic stress disorder (PTSD). Direct
exposure to the attack or to television coverage of the attack was associated with probable SAD or number of SAD symptoms, whereas proximity to Ground Zero or family member exposure were not. The identified pattern of associations existed independently of a child having probable PTSD. SAD should be considered among the conditions likely to be found in children after a large-scale disaster.

Examines children's memory for traumatic events, which includes sudden-onset events, natural disasters, witnessed events, and events in which the child is forced to participate. Evaluation of the role of stress in modulating memory performance; Information on children's ability to recall traumatic events; Details on the study.

Myanmar as a country in South-East Asia is vulnerable to disasters including storms, floods, fire, earth fall, earthquakes, depending on the geographical nature and climate of the area. The National Health Committee (NHC) of Myanmar has formed under it an Emergency Healthcare Committee. After the Asian tsunami, the Ministry of Health (MoH) formed the National Disaster Preparedness and Response Committee which developed the National Guidelines for Disasters Preparedness and Response. The experience of dealing with the tsunami has shown that psychosocial support to the affected community not only reduces its psychological distress but can also facilitate physical rehabilitation. Thus mental health and psychosocial aspects have been included in disaster preparedness and management plans of the MoH.

This article addresses the ways in which years of war and periods of serious drought have affected the cultural representations of the populations in Gorongosa District, Mozambique. In the wake of these events different cultural and historical representations have been disrupted, leaving the members of these communities with fragmented protective and resilience factors to cope effectively. Emphasis is placed on the disruption of madzawde, a mechanism that regulates the relationship between the child (one to two years of life) and the mother, and the family in general. The war, aggravated by famine, prevented the populations from performing this child-rearing practice. Nearly a decade after the war ended, the posttraumatic effects of this disruption are still being observed both by traditional healers and health-care workers at the district hospital. The results suggest that this disruption is affecting and compromising the development of the child and the physical and psychological health of the mother. An in-depth understanding of this level of trauma and posttraumatic effects is instrumental in making a culturally sensitive diagnosis and in developing effective intervention strategies based on local knowledge that has not been entirely lost but is nonetheless being questioned.


This chapter aims to describe the ways in which prolonged and multiple exposure to civil war and drought in the Gorongosa district of Sofala Province, Central Mozambique, influenced not only the psychological wellbeing of affected populations but also the wider stability and integration of families and communities. Quite apart from the destitution and profound discontinuities within the social order created by such exposure, it became increasingly difficult to perform the ceremonies and rituals that had long regulated life from birth (madzawde) to death (ntsanganiko) (Igreja 2003). In this way, armed conflict deprived the people of Gorongosa of vital social and cultural resources that had previously marked out their collective identity and
given meaning to their existence. The loss of such resources had particular consequences for the survival and wellbeing of infants, since historically it was through observation of the rite of madzawde that the physical, psychological and emotional development of the child in the first two years of life was regulated. Other trends observed through the research included an increase in domestic and community violence, marital instability, infant malnutrition and sexual abuse - all of which pose an added threat to infant survival. According to annual surveys, rates of infant morbidity and mortality.


The aim of this document is to provide concise, practical (but non technical) guidance on how to ensure appropriate infant and young child feeding in emergencies. A number of elements are also applicable in nonemergency settings. The Operational Guidance focuses especially on infants and young children under 2 years of age and their caregivers, recognising their particular vulnerability in emergencies. It is intended for emergency relief staff and programme managers of all agencies working in emergency programmes, including national governments, United Nations (UN) agencies, national and international non-governmental organisations (NGOs), and donors. It applies in emergency situations in all countries, and extends to non-emergency situations, particularly in the interest of emergency preparedness.


Populations affected by emergencies frequently experience enormous suffering. Humanitarian actors are increasingly active to protect and improve people's mental health and psychosocial well-being during and after emergencies. A significant gap, however, has been the absence of a multi-sectoral, inter-agency framework that enables effective coordination, identifies useful practices, flags potentially harmful practices and clarifies how different approaches to mental health and psychosocial support complement one another. The Guidelines offer essential advice on how to facilitate an integrated approach to address the most urgent mental health and psychosocial issues in emergency situations. Section 5.4 directly addresses children 0-8 years (extracted from preface & contents - RD).


Addressed primarily to staff of ministries of education, including national, provincial and district level planners and managers, in countries affected by conflict or natural disasters, or hosting refugees from a neighbouring state, detailed guidance on education in emergencies and reconstruction. Also intended for staff of United Nations organizations, donor agencies and non-governmental organizations (NGOs) working in support of ministry to promote education for emergency-affected populations. Focuses to a considerable extent on ensuring access to quality schooling at primary and secondary levels during emergencies. However, attention is also paid to early childhood development, vocational education, post-primary and higher education and nonformal education. Presents examples of the problems faced in different kinds of emergencies, and suggests policy options and strategies that have been found useful in such situations. Chapter 13 focuses specifically on development of early childhood programmes. (Extracted from introduction RD)


Discusses the roles of teachers in providing the support children need in war affected communities, outlining specific strategies including play, self expression and CBT that support children's needs. (RD)

While there is considerable understanding of the procedures that are used in disaster management, there is a gap in knowledge with respect to how key actors engage in planning and response activities and negotiate the complex array of tasks required. The empirical data collected entailed interviews and focus groups with SHA tenants and staff involved in the response to the Canberra bushfires 2003, Cyclone Larry in far north Queensland 2006 and the NSW coastal storms and floods 2007. The key findings from the project incorporate three themes concerning: the experiences and lessons from the past; the planning stages to prepare for disasters; and the forms of response and recovery. (Extracted from Executive Summary)


In an effort to promote the social and cognitive competence of youth, school psychologists must be prepared to address a multitude of contextual factors and life events that impact children's performance and adjustment in school and subsequent developmental trajectories. The domain of crisis preparedness and intervention has received increased attention during the past decade (as evidenced by a growing school crisis intervention literature) and is currently a training standard for school psychologists in some parts of the world. Crisis situations may emerge following natural disasters such as floods, fires, tornadoes or earthquakes and also from human generated situations such as bombings and school shootings. Each of these events is likely to affect the children and families in schools and communities by presenting them with problems that will be challenging to cope with. There are a variety of crisis preparedness and intervention models and strategies available to address crisis situations. Without a shared foundation for crisis intervention, responding to crisis situations may be further complicated, especially in situations where international colleagues are collaborating. Therefore, a shared foundation that includes both preparedness and intervention while emphasizing both developmental and school considerations will be invaluable in our efforts to facilitate collaboration among diverse colleagues across multiple contexts. The purpose of this article is to incorporate several models and frameworks in order to provide a shared foundation for school psychologists and other educational and mental health professionals regarding crisis preparedness and intervention. To establish a shared foundation for international crisis collaboration, it is also necessary to review the original works discussed in this brief overview and participate in relevant workshops.


This paper is a case study of the management of post-disaster trauma in 1960s Britain. It explores the traumatic aftermath of the 1966 Aberfan disaster (where 116 children and 28 adults were killed when a colliery spoil heap collapsed on top of a school in a small Welsh mining community) which had a devastating impact on the village. The professional and voluntary services made available to help the bereaved, survivors and wider community are documented and assessed. The paper demonstrates how limited finance and the popular and professional contemporary understanding of trauma and disasters hindered those services, and how the actions of government and media had a negative impact on the community's recovery. This case study of disaster management in the 1960s illustrates many of the pitfalls that continue to haunt the response to man-made tragedies in the UK.


This paper explores the issues confronting service providers setting up child and family mental health programmes in conflict, post conflict and disaster areas. Drawing on clinical experience and research in humanitarian settings, it calls for greater attention to the child’s perspective, their individuality and the cultural, social and political context in which they live. It argues that those concerned with the psychopathology of children in crises should widen their frame of reference beyond narrowly defined traumatic reactions to include other mental health and psychosocial issues, including the current problems of daily life and the needs of children with pre-
existing psychiatric disorders. It recommends culturally valid means of assessment, the creation of age-appropriate services and training for primary healthcare workers. Children's mental health needs in crises are varied, complex and intimately connected with their needs for security, food, shelter, education and family connection. This requires holistic, rights-based approaches that can access resources to address basic needs, advocate for security and protection, and recognize and address the needs of the more vulnerable children. This is the approach recommended by the Inter Agency Standing Committee Guidelines for Mental health and Psychosocial Support in Emergency Settings.


ChildFund Guatemala, in collaboration with International Medical Corps, completed a qualitative study in two departments of Guatemala: Huehuetenango and Quiche in October 2009. The main aim of the research was to learn directly from children, youth and those involved in their care, what they believe to be the major violence-related problems in their lives; how these problems affect them; and what solutions they recommended. 17 gender-divided focus groups with 116 children and youth between 8 and 18, including in and out of school and working children, and 3 groups with 20 adults including teachers and women. Key informant interviews were conducted with 30 adults and children from a wide range of backgrounds.

What this research shows is that the predominantly indigenous children and youth in rural and semi-urban communities in the departments of Quiche and Huehuetenango live lies of great insecurity and fear because of the threat of gangs and criminal violence in their neighbourhoods; and because of the lack of care and affection and the coercive means of discipline used at home. Structural changes to address impunity and inequity require institution-building and increasing the capacity of judiciary and police and the provision of youth programmes to support conflict transformation are recommended. (summative quotations extracted from paper RD)


The impact of Hurricane Andrew on 213 African American, Caucasian, and Hispanic elementary and middle school children was examined at 6 months postdisaster. Using self-report instruments, this case study examined the predictive utility of several hypothesized mediators of children's reactions to disaster. Results showed higher levels of intrusive symptomatology for girls and for elementary school children as compared with their middle school counterparts. No differences were found with reference to race. The lack of findings concerning race is addressed, as well as implications for future studies.


Terrorist acts - sudden, unpredictable, and dramatic by design - affect society at various levels, including the community, family, and individual. Children are usually affected most, yet relatively few studies have examined the effects of terrorism on children. Despite children's innate resilience, they may exhibit a variety of symptoms of acute stress reaction following traumatic events. Mental health plays an important role in disaster and terrorism preparedness efforts, especially when preparing for the anticipated effects on children and families. A comprehensive approach combines appropriate risk communication strategies, use of collaborative processes, and the ability to assess, diagnose, and treat children and their families. This approach may strengthen recovery, foster resiliency, and promote healing. Mental health practitioners must work together and across disciplines. Interventions should be developmentally appropriate. Finally, parents, mental health professionals, teachers, and other caring adults must remember to pay attention to their own responses to the trauma, get help for themselves when needed, and utilize effective and healthy coping strategies.
Kamel, H. (2006). *Early childhood care and education in emergency situations*. Paper commissioned for the EFA Global Monitoring Report 2007, *Strong foundations: early childhood care and education*. This paper will seek to review progress made to date in meeting the rights of children 3-6 years old in emergency situations. It will examine whether the world has met its commitments to ensuring the rights of children to early care and education when their lives have been disrupted by devastation and displacement as a result of natural or man-made calamities. It will analyse policy and practice from around the world in order to reveal what has been achieved so far and the challenges which still remain ahead to ensure the rights of the world's youngest children to adequate care and education in times of crisis. The paper concludes with a set of recommendations for further efforts necessary to ensure the care and education of young children in situations of emergency. (Extracted from Introduction)


A community disaster training program focusing on earthquakes, floods and landslides was implemented in Azankiri, Turkey, in 2002. It covered mitigation, preparedness and response aspects of natural disaster management. Four thousand community members participated in the training program delivered by 95 local trainers. This study evaluated the impact of participation in this program. One year later, 400 randomly selected participants in the training program and a comparable sample of 400 community members who did not participate in any disaster training program (nonparticipants) were surveyed. Disaster-related cognitions (i.e., disaster expectation, worry about future disasters, loss estimations if a disaster occurs, beliefs in the possibility of mitigation and preparedness) and reported preparedness behaviors were assessed. The relationship of sociodemographic, previous disaster experience, anxiety and locus of control variables with disaster-related cognitions and behaviors was examined. Results showed that participants in the training program had more disaster expectation, worry and loss estimation and more preparedness behaviors. Results of regression analyses, examining the relationship of the variables of the study with disaster cognitions, affect and actual preparedness behaviors showed that gender, education, being a participant in the training program, anxiety and locus of control are important variables related to different kinds of disaster-related cognitions. However, reported preparedness behaviors were quite low and this result needs to be viewed with caution. These results have important implications for the modification of programs for targeting sustainable behavioral change, which is likely to reduce the impact of future disasters.


Stress debriefing has been used extensively following traumatic events; however, there is little evidence of its effectiveness. This paper reports the effects of stress debriefing on the rate of recovery of 195 helpers (e.g., emergency service personnel and disaster workers) following an earthquake in Newcastle, Australia (62 debriefed helpers and 133 who were not debriefed). Post-trauma stress reactions (Impact of Event Scale) and general psychological morbidity (General Health Questionnaire." GHQ-12) were assessed on four occasions over the first 2 years postearthquake. There was no evidence of an improved rate of recovery among those helpers who were debriefed, even when level of exposure and helping-related stress were taken into account. More rigorous investigation of the effectiveness of stress debriefing and its role in posttrauma recovery is urgently required.


Disasters affect families as a whole, and symptoms displayed by a family member may lead to secondary traumatizations for other members of the family, especially the children. This study examines the effects of parental psychopathology and family
functioning on children's psychological problems six months after the earthquake in Bolu, Turkey. Forty-nine children aged between 7 and 14 and their parents were randomly chosen from among 800 families living in a survivor camp in Bolu. Both the children and parents were assessed by trained psychiatrists and psychologists using self-report measures for posttraumatic stress disorder (PTSD), depression, and anxiety symptoms six months after the earthquake. Family functioning in survivor families was also assessed using the Family Assessment Device (FAD). The results showed that the severity of PTSD in children was mainly affected by the presence of PTSD and the severity of depression in the father. State and trait anxiety scores of children were related to general family functioning. The constellation of PTSD symptomatology was different in fathers than in mothers: the most common type of symptoms was "externalizing" in fathers with PTSD. This study supports the notion that the mere presence of PTSD in parents may not be enough to explain the relational process in families experiencing trauma. Our findings with earthquake survivors suggest that when fathers become more irritable and detached because of PTSD symptoms, their symptoms may affect children more significantly.


Hurricanes and tropical storms served as natural experiments for investigating whether autism is associated with exposure to stressful events during sensitive periods of gestation. Weather service data identified severe storms in Louisiana from 1980 to 1995 and parishes hit by storm centers during this period. Autism prevalences in different cohorts were calculated using anonymous data on birth dates and parishes of children diagnosed with autism in the state mental health system, together with corresponding census data on all live births in Louisiana. Prevalence increased in dose-response fashion with severity of prenatal storm exposure, especially for cohorts exposed near the middle or end of gestation (p < 0.001). Results complement other evidence that factors disrupting development during sensitive gestational periods may contribute to autism.


In the days following the 9/11 tragedy in New York City, Disaster Child Care (DCC) and Childcare Aviation Incident Response (CAIR) volunteers provided care for the young children of families whose loved ones died in the World Trade Center collapse. This retrospective pilot study of 66 DCC/CAIR volunteers examined qualitative data on the following topics: (1) Observations of the children's caregivers/parents and differences from other childcare or disaster settings, (2) Personal reactions to the experience, differences from other childcare or disaster settings, poignant anecdotes, utility of debriefings, stress after returning from New York, and (3) Observations of coworkers' behavior and differences from previous disaster responses. Response rate was 71% (66 of 93 potential subjects). Parental behaviors noted were the following: distress (74%), difficulty separating (48%), and checking in to see whether child was safe (44%). DCC/CAIR volunteers reported high emotionality (28%), a need to share their experience (20%), and sleep disturbance (13%) upon return from New York City. Implications for future research and practice are discussed.


Although the knowledge base regarding very young children's responses to trauma has been expanding, descriptions of their responses to terrorism remain sparse. Yet, their vulnerability makes this an important group to study. Recent events in the United States (9/11, Hurricane Katrina) make this question highly relevant. This study aims to provide extensive descriptions of how children 5 years or younger on September 11th who were living in close proximity to Ground Zero responded that day and in the following months. Sixty-seven New York City parents (with 104 children) participated in focus groups between November 2001 and May 2002. Focus groups also provided a foundation for an in-depth study examining young children's adaptation following 9/11 and changes in parenting behaviors after the disaster. Findings on children's
behavioral and emotional reactions on 9/11 and in the 8 months after as well as their need to return to normalcy are reported. Consistent with current understanding of trauma symptoms in young children, parents reported behaviors including chronic sleep disruptions, fearful reactions, development of new fears, and increased clinginess and separation anxiety following the disaster. On the actual day, children's responses were described as ranging from calm and cooperative to difficult and panicky. Implications for working with parents and young children affected by terrorism or community-level trauma and directions for future research are discussed.


Studying survivors of natural disasters and traumatic events provides a unique opportunity to address some of the important and difficult questions in psychology and other social sciences. However, such an opportunity does not come without challenges. Several methodological challenges to studying survivors of natural disasters are discussed, including recruiting participants, choosing appropriate procedures, and the safety of data collectors. Several ethical issues are also presented, such as the ability of participants to make decisions, the impact of participating, and the importance of informed consent. In addition, approaches are suggested that help to deal with these methodological and ethical challenges. We conclude that while attention must be focused on methodological and ethical considerations, research stemming from natural disasters should be employed to answer important basic and applied conceptual questions and address issues of practice and policy, while ensuring that steps have been taken to protect participants and that the potential risks are minimal.


The need for crisis intervention plans and programs in schools has become more evident during the past decade with the increased incidence of school violence and other traumatic situations experienced by students, educators, school personnel, parents, and relatives of those involved. This need has resulted in an increase of professional literature, curriculum, and resources that address crisis intervention in school settings. Much has been learned from tragic school incidents in the 1990s, and that knowledge and experience has contributed to more comprehensive planning and development to meet the needs of the school community. This article presents an overview of the literature on school crisis intervention and discusses school crisis team models and interventions used in a variety of traumatic situations.


This study evaluated children's symptoms 3 and 9 months after the 1993 bombing of the World Trade Center, and the relationship between parent and child reactions when only the children had been in the building. Nine children who had been trapped in an elevator, 13 who had been on the observation deck, and 27 controls completed the Posttraumatic Stress Reaction Index and a Fear Inventory. Parents completed these measures about the children and comparable measures about themselves. Exposed children reported posttraumatic stress disorder (PTSD) symptoms and disaster-related fears; their parents reported experiencing PTSD symptoms. Only parents rated children's symptoms as decreasing significantly over time. Association between child symptoms and parent symptoms increased over time. Children's initial distress predicted parents' distress 9 months postdisaster.


Examined the psychological impact of living near a nuclear waste disaster that involved ongoing threat of radioactive contamination. Ss were an exposed sample (residence within a 5-mile radius of the nuclear plant) of 60 male and 60 female children (aged 7-15 yrs) and their parents and a nonexposed comparison sample of 30 female and 30 male children and their parents. Parent and self-ratings of the
children’s psychological functioning and posttraumatic stress disorder (PTSD) symptoms were obtained, along with cognitive variables. Minimal differences between the 2 samples were found. In the exposed sample, stress responses for the child self-reports showed several age group by gender interactions. Girls’ PTSD symptoms tended to increase with age while boys’ symptoms decreased, with intrusion showing the strongest effects. While child and parent PTSD symptom ratings were correlated, children reported approximately twice as many symptoms. Cognitive understanding increased with age and was greater in boys. Exposure and parent functioning significantly predicted outcome.

Kostelny, K. (2008). Psychosocial and protection outcomes of child centered spaces: Research on young children in Northern Uganda, Christian Children’s Fund. This study presents findings from research that compared the psychosocial well-being and protection of three to six year old children in similar communities in Internally Displaced Persons camps in Gulu, Uganda. The children in the intervention group participated in three CCSs, staffed by trained community members, and supported by Christian Children’s Fund. In the comparison group, the community in the camp had no organized activities for young children. In the aftermath of conflict and natural disasters, international organizations increasingly organize child centered spaces (also called childfriendly spaces, safe spaces, or emergency spaces for children) for children. Tangible, meaningful benefits for children occurred in several domains: protection, psychosocial well-being, and life skills. These results suggest that appropriately designed and implemented CCSs have specifiable benefits to children’s protection and well-being. (extracted from Executive Summary RD)

Kostelny, K. (2008). Starting up child centered spaces in emergencies: A field manual. Richmond VA, Christian Childrens’ Fund. This manual is divided into three sections. The first section describes CCF’s child protection framework, which provides the conceptual foundation for establishing CCSs. It includes CCF’s vision as it relates to child protection, child well-being and child rights; describes CCF’s Deprivation, Exclusion and Vulnerability Model; and explains the strategic rationale for establishing Child Centered Spaces. This section also provides information on the Child Centered Spaces approach, describing in detail the principles, functions and activities that comprise CCSs.

The second section is the core of this manual and provides 13 practical steps for implementing CCSs. The first steps include coordinating with other organizations, selecting the location and visiting the community. The next steps focus on community mobilization, selecting the CCS site and recruiting animators. The final steps include training, startup activities, monitoring and evaluation, and transitioning out of the CCS. Throughout this section, field examples are provided to show how various steps of the CCS process were implemented in different emergency contexts. A quick checklist is also supplied for each step, indicating the key elements and activities for the step. The steps are intended to serve as guidelines, not as a recipe. Because each emergency situation is unique, it is essential to create space for innovation and tailor one’s approach to the local context.

The third section contains the annexes and a reference list and provides supplemental resources for working with CCSs, including assessment tools, community mobilization guidelines, additional training modules, and record keeping and reporting forms. (Extracted from introduction - RD)

Kostelny, K. and M. Wessells (2005). “Psychosocial aid to children after the Dec 26 tsunami.” Lancet 366(9503): 2066-2067. The article suggests that what most child victims of the December 26, 2004 tsunami need is not therapy but community-based activities to help restore their sense of safety, connection to caring adults, and hope for the future. Christian Children’s Fund, working with local partners, established 240 child-centred spaces in affected areas of India, Sri Lanka, and Indonesia. These spaces provide swift psychosocial support by engaging children in activities intended to restore a sense of safety and predictability. The staff are local community volunteers. The centres also aim to benefit older children.

This paper reports on secondary analysis of data collected as part of an effort by social work providers and a major parochial school system to assess longer term impact and possible Post Traumatic Stress Disorder (PTSD) among children and adolescents in 17 schools heavily affected by flooding. The assessment protocol, implemented by classroom teachers, measured self-reported amount of damage from a major flood along with two standardized measures of PTSD. Discussed are findings regarding factors that predict PTSD including amount of harm and ability of family to recover, whether loss of residence was related to recovery and PTSD and other variables from this field screening of 3876 children and adolescents in the Midwest who lived in areas impacted by an extensive flooding.


In recent years, a number of large-scale disasters have occurred both locally and internationally, heightening our awareness of potential dangers. If a disaster were to occur at a school, there is the potential for a large number of children to be injured or affected in some way. The school community includes not only the staff and students who are on campus each day, but also students' parents and the surrounding neighborhood. How parents react during emergencies and disasters at schools is likely associated with their knowledge and perceptions of emergencies and disasters. Parents' preparedness levels and their planned response to a school-based emergency and how schools plan and manage for these reactions have not been explored. Utilizing a mixed methods design that included surveys, semi-structured interviews and focus groups with members of the communities in two South Los Angeles school districts, this study aims to provide an overview of parents' levels of emergency and disaster preparedness and the challenges they face in preparing for these events. Additionally, parents' planned responses to a school-based emergency or disaster are discussed as well as the challenges that schools may face as a result. Data from this study confirm that there are a number of challenges related to parents' planned response to a school-based emergency, including an expected inundation of parents to the schools, lack of communication between schools and parents and language barriers. Recommendations for schools are provided to take advantage of parent populations to better integrate them into schools' emergency planning processes.


Youth who are exposed to devastating natural disasters or terrorist attacks report high levels of posttraumatic stress (PTS) and may develop posttraumatic stress disorder (PTSD). This article summarizes evidence on the treatment of PTS reactions in these youth and describes interventions developed for the immediate aftermath of the event, the short-term recovery and rebuilding phase, or the long-term recovery phase. Psychological first aid and evidence-based psychoeducational materials show promise for the early phases of postdisaster recovery. For youth with persistent PTSD, cognitive-behavioral interventions appear promising but require further study. Children and adolescents exposed to disasters and acts of terrorism may need multicomponent interventions because their reactions are often multifaceted and often include other psychological problems.


This study examined (a) children's predisaster behavioral and academic functioning as a predictor of posttraumatic stress (PTS) following Hurricane Andrew and (b) whether children who were exposed to the disaster would display a worsening of prior functioning. Fifteen months before the disaster, 92 4th through 6th graders provided self-reports of anxiety; peers and teachers rated behavior problems (anxiety,
inattention, and conduct) and academic skills. Measures were repeated 3 months postdisaster; children also reported PTS symptoms and hurricane-related experiences (i.e., exposure). PTS symptoms were again assessed 7 months postdisaster. At 3 months postdisaster, children's exposure to the disaster, as well as predisaster ratings of anxiety, inattention, and academic skills, predicted PTS symptoms. By 7 months, only exposure, African American ethnicity, and predisaster anxiety predicted PTS. Prior anxiety levels also worsened as a result of exposure to the disaster. The findings have implications for identifying and treating children at risk for stress reactions following a catastrophic disaster.

Abstract: Extensive media exposure to natural disasters such as tsunamis may cause adverse effects including psychological distress and even posttraumatic symptoms in young children, particularly those who have suffered previous losses and trauma. This paper analyzes spontaneous representations of the 2004 tsunami through sandplay by a group of immigrant and refugee preschoolers, beginning 2 weeks after the tragedy. The children used a variety of coping strategies, making both nonverbal and verbal references to the tsunami. It was represented using a variety of figurines, including religious ones. We considered the children in light of four categories based on family homeland and psychological affinity to the tsunami experience. Our results suggest that sandplay provides an appropriate space to express and work through emotions stemming from the interaction of past and present experiences of adversity.

Describes the needs of young children in situations of armed conflict, in the context of known needs for optimal child development with the goal of developing programmes that reduce the risk and support psychosocial resources of children and families. It reviews the research current to date of writing and ways in which resilience can be developed through direct interventions. Successful tools and strategies as well as specific programmes are identified. (RD)

Background: Children are uniquely sensitive to toxic exposures in the environment. This sensitivity reflects children's disproportionately heavy exposures coupled with the biologic vulnerability that is a consequence of their passage through the complex transitions of early development. Methods and Results: To assess effects on children's health associated with the attacks on the World Trade Center (WTC) of September 11, 2001, research teams at the Mount Sinai School of Medicine and other academic health centers in New York City launched a series of clinical and epidemiologic studies. Mount Sinai investigators undertook a prospective analysis of pregnancy outcomes in 182 women who were pregnant on September 11, 2001, and who had been either inside or within 0.5 miles of the WTC at the time of the attacks; they found a doubling in incidence of intrauterine growth retardation (IUGR) among infants born to exposed mothers as compared to infants born to unexposed women in northern Manhattan. A Columbia research team examined pregnancy outcomes in 329 women who lived, worked or gave birth in lower Manhattan in the 9 months after September 11; they found that these women gave birth to infants with significantly lower birth weight and shorter length than women living at greater distances from Ground Zero. NYU investigators documented increased numbers of new asthma cases and aggravations of preexisting asthma in children living in lower Manhattan. Mount Sinai mental health researchers documented a significant increase in mental health problems in children who directly witnessed the attacks and subsequent traumatic events; these problems were most severe in children with a past history of psychological trauma. The New York City Department of Health and Mental Hygiene established a WTC Registry that has enrolled over 70,000 persons of all ages in lower Manhattan and will follow the health of these populations to document on a continuing basis the health consequences of September 11.

Grief and dissociation after traumatic exposures are among the most important predictors of posttraumatic stress disorder (PTSD). This article introduces the Traumatic Dissociation and Grief Scale (TDGS), a 23-item measure easily administered. The TDGS, the Child PTSD-Reaction Index (CPTSD-RI), and a questionnaire concerning risk factors related to the event were administered to 202 school-aged children who had been directly exposed to the 1999 earthquakes in Turkey and a nonexposed control group. Factor analysis of the TDGS yielded four factors: perceptual distortions, body-self distortions, irritability, and guilt and anhedonia. A moderate positive correlation was noted between the TDGS and the CPTSD-RI. Different sets of risk factors were associated with different scale factors. The results suggest that the assessment of psychopathology in children following a disaster requires the complementary evaluation of symptoms of posttrauma, dissociation, and grief.


Toddler toy play evolves in a predictable manner and provides a valid, nonverbal measure of cognitive function unbiased by social behaviors. Research on prenatal maternal stress (PNMS) indicates that exposure to stress in utero results in developmental deficits. We hypothesized that children exposed to high objective PNMS from a natural disaster early in pregnancy would exhibit higher rates of stereotypical play and lower rates of mature functional play than their low-stress counterparts would. We examined the functional play abilities of 52 2-year-olds exposed to low or high objective PNMS from a natural disaster within a nonstructured play session. Toddlers exposed to high objective PNMS, subjective PNMS, or both exhibited less functional and more stereotypical toy play, with less diversity, compared to toddlers exposed to low PNMS. PNMS appears to affect functional play development in toddlers negatively. These results replicate delays in language and intellectual functioning observed in these toddlers using the Bayley Scales.


Purpose of review: Terrorist attacks are increasing in different parts of the world. The psychiatric consequences of terrorist attacks, particularly post-traumatic stress disorders, are often underrated. Recent terrorist attacks, particularly the attacks of September 11, 2001 in the USA, focused attention on post-traumatic stress disorder. This review examines the prevalence rates and characteristics of post-traumatic stress disorder after terrorist attacks. Recent findings: At least 28-35% of people exposed to a terrorist attack may develop post-traumatic stress disorder. Whereas persons directly exposed to terrorist attacks have a greater risk of developing post-traumatic stress disorder, the secondary effects of vicarious exposure on people not directly exposed are significant. Individuals with post-traumatic stress disorder have higher healthcare utilization and medication use. More than 40% of people across the USA experienced substantial symptoms of stress after the attacks of September 11, 2001. The rates of acute post-traumatic stress disorder and depression among residents of lower Manhattan, New York, were twice the baseline rate 5-8 weeks after the attacks. The presence of pre-existing stressors, levels of social support, female sex, and Hispanic ethnicity were important predictors of post-traumatic stress disorder. Disaster-related television viewing could be harmful for children. The role of psychological debriefing in the prevention of post-traumatic stress disorder is questionable. Summary: Most suffers of post-traumatic stress disorder are reluctant to see mental health professionals. Primary care physicians are best suited to identify and manage individuals with posttraumatic stress disorder. There is a need to train primary care practitioners in the identification and management of the psychiatric consequences of trauma and terrorism.

Faculty members from the University of Southern Mississippi conducted extensive research into emergency planning and disaster preparedness in P-12 schools in Mississippi before and after Hurricane Katrina. Findings disclosed that although few schools had no crisis management plans, a significant number that had emergency plans did not include provisions for large-scale disasters. Many schools had outdated plans. Respondents rated the effectiveness of crisis management plans in relation to Hurricane Katrina. The most highly rated features included the roles played by school leaders, the effectiveness of the administrative chain of command, and interpreting the storm's impact to the media. The most frequently cited areas of inadequacy included communication channels for administration, staff, and parents; dealing with electrical, fuel, and other energy needs; and the inability to operate independently for a sustained period of time in the wake of the storm. Study participants made policy and action recommendations to strengthen emergency planning and disaster preparation that were analyzed and reported by the researchers.


Background: Appraisal and coping following a disaster are important factors in children's post-traumatic stress (PTS) symptoms. However, little is known about predictors of disaster coping responses. This study examined stress-load, appraisals and coping styles measured prior to the September 11 terrorist attacks as predictors of 9/11-specific appraisals, coping and PTS. Methods: A community sample of children and parents (N = 143) participating in an ongoing study were interviewed by phone approximately 1 month following 9/11. Results: Pre-attack stress-load, appraisal and coping styles predicted children's 9/11-specific appraisals, coping, and PTS. 9/11-specific threat appraisals and avoidant coping predicted higher PTS and mediated the effects of pre-attack stress-load and threat appraisal. Conclusions: Pre-disaster stress-load, appraisal and coping styles predict disaster-specific appraisal and coping, which in turn, contribute to PTS. Coping interventions might mitigate PTS symptoms following a disaster.


The aims of this study were to assess the psychological response of children following the September 11, 2001 terrorist attacks in New York and Washington, DC and to examine prospective predictors of children's post-attack responses. Children's responses were assessed in a community sample of children in Seattle, Washington, participating in an ongoing study. Symptomatology and temperament assessed prior to the attacks were examined as prospective predictors of post-attack post-traumatic stress (PTS), anxiety, depression and externalizing problems. Children demonstrated PTS symptoms and worries at levels comparable to those in children directly experiencing disasters, with 77% of children reporting being worried, 68% being upset by reminders, and 39% having upsetting thoughts. The most common PTS symptom cluster was re-experiencing, and 8% of children met criteria consistent with PTSD. African-American children reported more avoidant PTS symptoms and being more upset by the attacks than European-American children. Girls reported being more upset than boys. Prior internalizing, externalizing, social competence and self-esteem were related to post-attack PTS; and child inhibitory control, assessed prior to the 9/11 attacks, demonstrated a trend towards an association with post-attack PTS symptoms controlling for prior levels of symptomatology. PTS predicted child-report anxiety and conduct problem symptoms at follow-up, approximately 6 months after 9/11. Children experiencing a major disaster at a distance or indirectly through media exposure demonstrated worries and PTS symptoms suggesting that communities need to attend to children's mental health needs in response to national or regional disasters. Pre-disaster symptomatology or low self-regulation may render children more vulnerable in response to a disaster, and immediate post-disaster responses
predict subsequent symptomatology. These variables might be used in the identification of children in need of intervention.


The concept of vulnerability in research derives from a specific set of historical circumstances relating to abuses in biomedical research. Now so many people and groups have been labeled vulnerable that the concept has lost much of its force. In disaster research, participants should not be automatically considered vulnerable unless they are legally designated as such, for example, children. Instead specific aspects of the research should be thoroughly examined. Examples are the potential for the participants to be pressured to participate in several protocols, political or social turmoil surrounding the disaster, and cognitive impairments or mental health problems. In addition to a careful consent process, there should be procedures in place to provide assistance to participants who experience serious distress.


Objective: We sought to identify the psychosocial characteristics of high earthquake exposure subjects that were associated with the development of post-disaster morbidity and with recovery. Method: Data reported are from 515 participants in a longitudinal study of the psychosocial effects of the 1989 Newcastle (Australia) earthquake. Subjects were allocated to three subgroups (low morbidity; recovered; and persistent morbidity) on the basis of their Impact of Event Scale scores across the four phases of the study. Differences between these subgroups were examined on a broad range of variables. Results: Several background, dispositional, coping style and exposure-related factors characterised those who developed psychological morbidity, only a small subset of which differentiated between those who recovered and those with persistent morbidity. Conclusions: Post-earthquake morbidity persists longer in those who are older, have a history of emotional problems, have higher neuroticism, use more neurotic defenses, and report higher levels of post-disaster life events.


This article discusses the effects of bushfire on young children, whether directly or indirectly involved.


In this article, the author discusses the use of current events, particularly the 2004 Indonesian tsunami and Hurricane Katrina, in teaching elementary students in the U.S. The author found that this method is a powerful way for elementary teachers to spur historical, geographic, economic, and political discussions. Natural disasters can also promote conversations about civic responsibility. What may be more important is that students begin to recognize their role as contributing, caring members of an interconnected global society.


This report looks at research that assesses the effectiveness of measures taken to mitigate the impact of direct experience of armed conflict on the psychosocial and cognitive development of children aged 0-8. The aim of the first stage of the review was to produce a systematic map of research by identifying and describing studies that examined the outcomes for children of interventions to mitigate the effects of direct experience of armed conflict on children aged 0-8. As a second stage of the review, we reviewed a smaller set of studies in-depth. (Extract from Summary RD)

Emergencies are not only sudden events with natural causes that can be ameliorated with resources from outside. The causes and consequences of emergencies with sudden or slow onset, those that are complex and involve conflict, or are permanent emergencies are all deeply rooted in the vulnerability of people to hazards and their incapacity to recover. This will have implications for care behaviours and practices in the feeding, health, hygiene, and psychosocial areas. Families react to slow-onset emergencies by managing a declining resource with inevitable negative impacts on child care. Food intake declines. At the extreme of destitution, families may migrate to refugee camps where children face health crises as large displaced populations congregate around contaminated water sources. Breastfeeding may cease. In war situations, children face extreme psychosocial stresses. The importance of care for young children is given insufficient attention by those providing assistance from outside. Care interventions should improve the effectiveness of health, food, and psychosocial support.


Presents research which investigated the diagnostic efficacy of posttraumatic stress disorder (PTSD) symptoms in children that were exposed to Hurricane Hugo. Overview of PTSD; Reference to previous of studies following exposure to a traumatic event; Research methods utilized; Description of the study population; Conclusion of this research.


This study examines the association between trauma exposure and posttraumatic stress disorder (PTSD) among 157 help-seeking children (aged 8-17). Structured clinical interviews are carried out, and linear and logistic regression analyses are conducted to examine the relationship between PTSD and type of trauma exposure controlling for age, gender, and ethnicity. Confrontation with traumatic news, witnessing domestic violence, physical abuse, and sexual abuse are each significantly associated with PTSD. Witnessing a crime, being the victim of a crime, and exposure to accidents, fire, or disaster are not associated with PTSD. These findings underscore the association between interpersonal violence and childhood PTSD.


The author reflects on the important role played by health professionals on the recovery of people affected by natural disasters in Australia. The author cites issues that were considered important for health professionals, including the impact of the initial disaster exposure and losses, psychological distress and the characteristics of the post-disaster environment. The author further examines the impact of losing important people on children, who were affected by bushfires.


10. The expert, Ms. Graça Machel, hereby transmits her final report on the impact of armed conflict on children, pursuant to resolution 48/157. The report sets out the findings and recommendations of the expert, who used the Convention on the Rights of the Child throughout her work as a guiding source of operative principles and standards. The Convention on the Rights of the Child represents a new, multidisciplinary approach to protecting children. It demonstrates the interdependence of all children’s rights, and the relevance of those rights to the activities of a whole host of actors at all levels. In accordance with the Convention on the Rights of the Child, this report uses the term "child" to include everyone under the age of 18.
11. In the process of her work, the expert identified a number of particular concerns in addition to those identified in paragraph nine of resolution 48/157, including: the changing patterns of conflict; specific impacts on girls and the children of minority and indigenous groups; economic embargoes; rape and other forms of gender-based violence and sexual exploitation; torture; the inadequate provision of education, health and nutrition and psychosocial programmes; the protection and care of refugee and internally displaced children and other children at particular risk; and the inadequate implementation of international human rights and humanitarian law. Accordingly, with the cooperation of relevant inter-governmental and non-governmental organizations and individual experts, a programme of research into these issues was undertaken through the preparation of twenty-five thematic papers and field-based case studies. (Extracted from paragraphs 10-11 - R Dunn)

To fulfill the health teaching and promotion responsibilities of public health nurses, a teaching intervention was devised to prepare low-income, low-resource families to survive a worst-case disaster scenario. The purpose of this study is to introduce that plan. Design: Teaching sessions were held to increase awareness about disaster preparedness and to provide the resources necessary for preparing disaster kits on a restricted budget. Sample: This project focused on families enrolled at the Children's Relief Nursery in Portland, Oregon's St. Johns District. Measurements: Posttest assessments and client follow-up at 3, 6, and 12 months were used to assess the effectiveness of the curriculum and follow-through on kit preparation. Results: A replicable teaching tool was successfully developed, and the interest and commitment of community partners dedicated to assisting restricted-budget families was secured. Conclusions: States' disaster plans hinge on individuals' implementation of their own survival plans, and it is vital that these individuals be made aware of their responsibility. It is truly a matter of life and death that families possess the skills, knowledge, and resources to carry out a disaster survival plan successfully, and it is the ethical responsibility of the public health nurse to intervene.

This paper provides background information on emergency Safe Spaces for children and specific information for responses in Haiti and the Solomon Islands. In 2007, both countries experienced natural disasters that resulted in internal displacement of thousands of people. The Save the Children Alliance created Safe Spaces for children living in camps for internally displaced persons. The project sought to accomplish 'B-SAFE' strategies through emergency education, psychosocial, and protection interventions. The B-SAFE strategies are to (B)uild relationships, cooperation, and respect among peers; to (S)creen for high-risk children and youth; (A)ctive, structured learning and life saving information; to (F)acilitate children's natural resilience and a return to normalcy; and to (E)stablish a sense of security and self-esteem. The project made use of child and parent surveys and observation tools that measured B-SAFE indicators. Analysed data demonstrated an improvement in children's behavior participating in the programme.

Hurricane Katrina had a devastating impact on hundreds of thousands of Louisiana and Mississippi families. Housing was destroyed, jobs were lost, and family members were separated, sometimes in different states and without communication. Postdisaster stress reactions were common, with vulnerable individuals most affected. Mental health services were not adequate to meet immediate needs, and postdisaster mental health issues often emerge over time. This article describes the mental health needs of dislocated and evacuee children and families and the steps that were taken to develop mental health programs that would be sustainable over time to meet this new level of need.

During emergency situations in developing countries, young children have been identified as the most nutritionally vulnerable group. Comparatively less is known regarding nutritional risk of individuals in well-nourished societies hit by a major disaster. The aim of the present study, therefore, was to assess the nutritional status of Greek people who were left homeless after the Athens 1999 earthquake. A total of 225 volunteers from two camps were surveyed for dietary intake information and surrogate measures of nutritional status. Energy consumption and anthropometric indices of the children and adolescents revealed no sign of undernourishment. On the other hand, adults and the elderly consumed considerably less energy than that required for long-term preservation of health. Short-term energy and protein deficits, however, did not jeopardise their nutritional status as it might have expected, on the basis of high body mass indexes and normal haematological and biochemical profiles that were documented. In conclusion, the results of the present study indicate that nutritional risk in the acute phase after a major emergency in a previously well-nourished population is rather low. This is especially true for younger individuals, probably due to increased provision from the family and the community. Nevertheless, older persons may face increased risk as the situation is prolonged.


Objectives Debate persists about whether people of different ages react similarly to traumatic events, and whether elderly people are more vulnerable to such events, or better able to cope with them. The first aim of this paper was to shed light on this debate by comparing the post-traumatic responses of young, middle-aged and elderly community residents who had been exposed to technological disasters. The second aim was to differentiate between these three age groups in terms of coping strategies. Methods One hundred and forty-eight community residents, who were exposed to two technological disasters, participated in the study. They were assessed using the Impact of Event Scale (IES), the General Health Questionnaire (GHQ-28) and the Ways of Coping Checklists (WOC). Results The results showed that in terms of IES, GHQ and WOC scores, no significant differences were found across the three age groups. However, main effects were found according to type of disaster and intensity of exposure to disaster. One significant interaction effect was that residents exposed to the aircraft crash used significantly more confrontive coping than those exposed to the train collision, in all three age groups. Correlation coefficients results showed that for all three age groups, on the whole, the more they experienced intrusive thoughts and avoidance behaviour, the more they experienced general health problems. Conclusions Following exposure to technological disasters, young, middle-aged and elderly community residents could display similar post-traumatic responses and employ similar coping strategies, which contradicts the vulnerability hypothesis and the inoculation hypothesis.


Background: Exposure to adversity does not necessarily lead to the development of psychopathology in all affected children. This study examined the factors associated with resilience and vulnerability in mental health in the Gaza Strip in 2007. Methods: Children selected from a random sample of kindergartens (3-6 years old, N = 350) were assessed for growth and their mothers administered an interview including a psychometric test battery. Results: Factors associated with resilience were maternal rated good health, higher maternal level of education, and less child exposure to traumatic events. Factors associated with vulnerability were poor maternal mental health, and male gender. Conclusions: Our findings highlight the importance of maternal health and education in affecting children’s mental health.

Crisis management logic suggests that planning and preparing for crisis should be a vital part of institutional and policy toolkits. This paper explores the difficulties in translating this ideal into practice. It focuses on four key difficulties. First, crises and disasters are low probability events but they place large demands on resources and have to compete against front-line service provision. Second, contingency planning requires ordering and coherence of possible threats, yet crisis is not amenable to being packaged in such a predictable way. Third, planning for crisis requires integration and synergy across institutional networks, yet the modern world is characterised by fragmentation across public, private and voluntary sectors. Fourth, robust planning requires active preparation through training and exercises, but such costly activities often produce a level of symbolic readiness which does not reflect operational realities. Finally the paper reflects on whether crisis preparedness is a "mission impossible", even in the post-9/11 period when contingency planning seems to be an issue of high political salience.


Following the January 1994 bushfire disaster 4000 children from kindergarten to grade 12 were involved in school based screening to identify emotional distress. This paper reports the prevalence and severity of post traumatic stress disorder in the population. The second part details the workbook, 'The bushfire and me', which enabled parents to provide treatment for their primary age children in their home, integrated with visits to their school counsellor.


Objective: To report on the use of the Post Traumatic Stress Disorder Reaction Index (PTSD-RI) and the Strengths and Difficulties Questionnaire (SDQ) in identifying children and adolescents who may require psychological interventions following exposure to a wildfire disaster. Method: Six months after a wildfire disaster, we conducted a school-based program to screen for wildfire-related events, such as exposure to and perception of threat, posttraumatic stress disorder (PTSD), and general psychopathology. Results: The screening battery was completed by 222 children (mean age 12.5 years, SD 2.48; range 8 to 18 years). Severe or very severe PTSD was reported by 9.0% of students, while 22.6% scored in the abnormal range on the Emotional Symptoms subscale of the SDQ. Younger children and individuals with greater exposure to and perception of threat experienced higher levels of PTSD and general psychopathology. Female students reported a greater perception of threat but did not report higher levels of PTSD or other symptoms. Conclusions: Screening was well received by students, parents, and staff and proved feasible in the postdisaster environment. The PTSD-RI and SDQ demonstrated different individual risk associations and functioned as complementary measures within the screening battery. The identification of children at greatest risk of mental health morbidity enabled service providers to selectively target limited mental health resources.


Objective: Proactive, school-based psychological testing for emotional distress and depression was employed 6 months after a bushfire disaster. The service provision aim was to provide children with the greatest emotional distress the relatively limited therapeutic resources available in the post-disaster environment. Specific hypotheses were tested: that the prevalence of emotional distress and depression would be elevated 6 months post disaster; that emotional distress would be correlated with traumatic events; and that depression would be related to experiences of loss. Method: Six months after a bushfire disaster grade 4, 5, and 6 students (n = 601) participated in screening using a test battery measuring emotional distress,
depressive symptoms and trait anxiety. Results: Twelve percent (n = 72) of children experienced severe emotional distress 6 months after the bushfire. Rates of depression were similar to rates in non-traumatised child community samples. Multivariate analysis suggested that emotional distress was significantly associated with trait anxiety, evacuation experience, the perception that parents may have died during the bushfire, and depressive symptoms. Depressive symptoms were associated with total distress score, trait anxiety and perception of threat to the parents. Conclusions: Substantial mental health morbidity was identified 6 months after a bushfire disaster. The usefulness of post-disaster service provision influenced by proactive screening is discussed and reasons for further research highlighted.


This report examines the case for implementing preventive mental health strategies after disasters based on an analysis of the patterns of post-traumatic morbidity identified after the "Ash Wednesday" bushfires in Australia. While a significant increase number of problems were identified which would tend to hinder the acceptance and implementation of any such preventive service. Also, the available objective evidence about the effectiveness of crisis intervention services following traumatic events remains tentative. Based on this experience, a series of recommendations are made about the future management of similar events.


This study examined the literature on children's responses to natural, technological and na-tech disasters via content analysis. Twenty two articles documenting children's responses to disasters were collected and analyzed. Children's responses were examined by (a) disaster type; (b) measurement instrument used to assess response; (c) age; and (d) administration of measures to children or their caregivers. Results indicate that it is important to ask children directly about their responses to disasters, regardless of disaster type, rather than relying on caregivers assessments. Also, witnessing scenes of destruction and/or life threatening situations elicits more stressful reactions than the type of disaster experienced. As such, the perceived threat rather than the disaster agent itself is deemed the more important factor in children's post-disaster psychopathology.


The French Army medical service carried out an epidemiological survey to estimate health indicators in children living in Meulaboh, Indonesia, in the weeks following the tsunami of December 26, 2004, within a sample from refugee camps, schools, and quarters of the town. Thirty-four percent of the children in camps, 21.9% in schools, and 49.5% from quarters presented psychological trauma. Malnutrition affected 20.5% in camps and 34.4% in the town between 6 and 59 months, 11.3% in camps, and 7.6% in schools between 6 and 15 years. The children had suffered various symptoms since the tsunami; access to care was possible for 53.9% in the camps, 23.8% from schools, and 39.3% from the town. Those results have been subsequently used by the local health authorities to improve child health care. The method used for this survey could be applied for future disaster scenarios.


Most experts on child and family posttraumatic stress disorder have focused their attention on ongoing child abuse and domestic violence, to the relative neglect of the more temporally delimited but equally shattering effects of disaster stress and bereavement due to homicide. This article discusses some of the special diagnostic and treatment issues that apply to these groups of survivors and addresses the unique therapeutic challenges of doing psychotherapy with individuals and families in extreme crisis.

Disaster management is dominated by top-down relief efforts that assume children and youth are passive victims with no role in communicating risks or preventing and responding to disasters. This article challenges these assumptions and critically assesses prevailing theoretical models of risk communication using two case studies that highlight the unique needs and potential roles of children and youth as resources or receivers of disaster management information. These studies in El Salvador and New Orleans used various participatory and qualitative techniques with young people, parents and policy makers. The findings suggest that the roles of children and youth as potential informants within informal and formal risk communication networks have been significantly underestimated, but their positive role in disaster risk reduction must also be seen in light of its possible burdens.


Most of the world's children live in resource-poor countries where people are at a relatively high risk of exposure to catastrophic situations arising from conflict and natural disasters. Given the potential social, psychological and psychiatric consequences of exposure to disaster, mental health and psychosocial support programmes are increasingly part of humanitarian aid. A minimum standard on mental and social aspects of health is included in the recently revised Humanitarian Charter and Minimum Standards in Disaster Response (Sphere Handbook) (Sphere Project, 2004). Most recommendations for mental health and psychosocial interventions in guidance documents are based on expert opinion rather than research. Consequently, interventions are being implemented without full understanding of their potential benefit or harm. This paper offers a child-focused review of the evidence for each of the interventions described as indicators for the Sphere standard on mental and social aspects of health. It suggests some, but limited, support for each of them. However, the evidence base needs substantial strengthening.


The Office of Disaster Preparedness and Emergency Management (ODPEM), the disaster management headquarters of the Government of Jamaica, understands that the best approach to take in effectively protecting children during emergency situations is to create a culture of risk reduction in which all involved are aware of their local hazards and are actively involved in reducing the resulting risks. This includes the promotion of disaster risk education in schools and also the twin effort of integrating children’s needs into the Comprehensive Disaster Management framework. This field report describes the efforts of the ODPEM in protecting Jamaican children in emergency situations. This was and continues to be achieved through two main approaches: building a culture of prevention in and through schools and integrating children’s rights into disaster management and response.


This paper addresses a very salient feature of rural life and landscapes in Australia, natural disasters, and offers a psychological perspective on individual and community perceptions, responses, preparedness and planning. The convergent perspective offered reflects research and practice findings and insights from social and environmental psychology, as well as clinical, health and community psychology. The objective is to briefly characterise how these psychological approaches frame the psychological and social reality of these threats and events, and to canvas what insights and evidence-based best practice psychology have to offer allied professionals and paraprofessionals, and rural communities, as they experience and come to terms with the vagaries and extremes of the Australian environment.
Coordinated and effective interventions are critical for relief efforts to be successful in addressing the health needs of children in situations of armed conflict, population displacement, and/or food insecurity. We reviewed published literature and surveyed international relief organizations engaged in child health activities in complex emergencies. Our aim was to identify research needs and improve guidelines for the care of children. Much of the literature details the burden of disease and the causes of morbidity and mortality; few interventional studies have been published. Surveys of international relief organizations showed that most use World Health Organization (WHO), United Nations Children's Fund (UNICEF), and ministry of health guidelines designed for use in stable situations. Organizations were least likely to have formal guidelines on the management of asphyxia, prematurity, and infection in neonates; diagnosis and management of children with human immunodeficiency virus (HIV) infection; active case-finding and treatment of tuberculosis; paediatric trauma; and the diagnosis and management of mental-health problems in children. Guidelines often are not adapted to the different types of health-care workers who provide care in complex emergencies. Evidence-based locally adapted guidelines for the care of children in complex emergencies should be adopted by ministries of health, supported by WHO and UNICEF, and disseminated to international relief organizations to ensure appropriate, effective, and uniform care.

PURPOSE. Children are especially vulnerable to the effects of chemical and biological weapons of mass destruction (WMD) because of physiologic, pharmacologic, and developmental characteristics. Presentation of signs and symptoms of exposure to biological and chemical agents are similar to those seen in adults. Pediatric considerations for decontamination and treatment of child victims of biological and chemical agents are discussed. CONCLUSION. As front-line providers, nurses need to be aware of potential agents, their uses and effects as WMD, and recommended treatments. PRACTICE IMPLICATIONS. Understanding the additional physiologic and situational needs of children, nurses can optimize the survival and outcomes of children when disaster strikes.

Striking at the nation's highly populated industrial heartlands, two massive earthquakes in 1999 killed over 25,000 people in Turkey. The economic cost and the humanitarian magnitude of the disaster were unprecedented in the country's history. The crisis also underscored a major flaw in the organization of mental health services in the provinces that were left out of the 1961 reforms that aimed to make basic health services available nationwide. In describing the chronology of the earthquakes and the ensuing national and international response, this article explains how the public and governmental experience of the earthquakes has created a window of opportunity, and perhaps the political will, for significant reform. There is an urgent need to integrate mental health and general health services, and to strengthen mental health services in the country's 81 disparate provinces. As Turkey continues her rapid transformation in terms of greater urbanization, higher levels of public education, and economic and constitutional reforms associated with its projected entry into the European Union, there have also been growing demands for better, and more equitably distributed, health care. A legacy of the earthquakes is that they exposed the need for Turkey to create a coherent, clearly articulated national mental health policy.

Manual designed for parents and teachers describes normal and severe reactions to war-related trauma in children of different age groups (2-5, 6-12, 13-16). Provides
strategies to support children and guidance for instances where professional help is required. Based on field tested methods (not specified) (RD).


Disasters, by their very nature, are extremely disruptive to people's lives in addition to the injuries and property destruction they cause. Also, the psychological effects can linger for years, long after the physical damage has been repaired. Although many psychological studies have focused on children there is one aspect of this important topic that has never been addressed: how to begin psychological support in the field immediately after the disaster. EMS personnel by their nature, are compassionate people but have no training or equipment to help children to give psychological help and support to children caught up in a disaster. Hospital pediatric personnel have used play and art therapy for years to help children deal with the psychological trauma of being hospitalized. We present a concept that uses the basics of established hospital play and art therapy that can be easily used by disaster personnel at a disaster scene. Simple supplies and a page of easily understood instructions will allow this forgotten aspect of disaster to be addressed. This paper presents a new concept that outlines how Emergency Personnel can offer support with a minimum of supplies and training.


Twenty-five women remaining in a city devastated by an earthquake were compared with 24 relocated survivors and 25 comparison women. The women were administered a structured PTSD interview, the Hamilton Depression Scale, and SCL-90-R. The women in both exposed groups showed significantly more symptoms of avoidance, arousal, and total PTSD than the comparison group. The women in the relocated city had significantly higher depression scores than the women in the earthquake city. On the SCL-90-R, relocated women were most symptomatic and comparison group women were least symptomatic. Relocation after a disaster appears to be associated more with risk for depression than with PTSD in situations where recovery is delayed following the trauma.


(from the book) Does terrorism have a unique and significant emotional and behavioral impact among adults and children? In what way does the impact of terrorism exceed the individual level and affect communities and specific professional groups, and test different leadership styles? How were professional communities of mental health clinicians, policy makers, and researchers mobilized to respond to the emerging needs post-disaster? What are the lessons learned from the work conducted after 9/11, and the implications for future disaster mental health work and preparedness efforts? Yuval Neria and his team are uniquely placed to answer these questions having been involved in modifying ongoing trials and setting up new ones in New York to address these issues straight after the attacks. Intended for psychiatrists, mental health professionals, and policy-makers.


At 3 to 4 weeks after the December 2004 tsunami disaster we assessed symptoms of posttraumatic stress disorder (PTSD) in 264 children who lived in severely affected coastal communities in Manadkadu (northern coast), Kosgoda (western coast), and Galle (southern coast) in Sri Lanka. The prevalence rate of tsunami-related posttraumatic stress disorder (PTSD) (ignoring the time criterion) ranged between 14% and 39% and an additional 5% to 8% had PTSD unrelated to the tsunami. The PTSD symptoms were explained by the severity of the trauma exposure and family loss, as well as previous traumatic events. The results confirm the relevance of the individual history of traumatic events for the genesis of PTSD and indicate a high need of mental health assistance among the tsunami-affected children in Sri Lanka.

Wars deprive millions of children of an education, yet education in emergencies has not traditionally occupied a prominent place in humanitarian thinking. No one dies from not going to school, and other lifethreatening needs – for food, water, shelter or healthcare – can at first glance seem more pressing. Amid conflict and crisis, education programming has been viewed as a luxury, and a task best left to the development community. This paper argues for a reappraisal of the position of education in emergency programming. It explores the links between education and the wider protection needs of the children it assists. It suggests that, as protection in conflict emerges more clearly as a legitimate humanitarian concern, so the role of education as a tool of protection must be more clearly understood. How does conflict affect a child’s education, and what impact does this have on an affected individual’s social or cognitive development? In what ways can education enhance the physical and psychosocial protection of children in war-affected or displaced communities? What risks does education programming in these contested environments present, for children and for agencies themselves? What is currently being done, and how could it be done better? This paper does not offer definitive answers to these questions. Education in emergencies is a young area; the evidence of its impact is often anecdotal, and although its status as a humanitarian concern has gained legitimacy in recent years, it has yet to be accepted across the humanitarian community. Much more needs to be done to enhance our understanding of the links between education and child protection in emergency situations.


A random sample of 197 practicing school psychologists who were members of the National Association of School Psychologists (NASP) completed a survey questionnaire on experiences and perceptions with regard to school crisis preparedness, prevention, and intervention. Respondents indicated having the most direct experience with student-student physical assaults, serious illness or injury of students, unexpected students deaths, suicide attempts, and guns or other weapons at school. School psychologists reported that their schools used a wide variety of prevention and intervention strategies, most of which have been advocated in the literature. Respondents reported being most involved in the implementation of crisis prevention and intervention strategies and less involved in development and evaluation. Results and implications are discussed within the context of empirically supported practices and school psychologists' readiness to assume larger roles in crisis prevention and intervention.


Children and adolescents are one of the very vulnerable groups in any disaster situation. Not only did around 10,000 children die in the tsunami in Sri Lanka, but the survivors experienced a number of symptoms. Children and adolescents were often not allowed to grieve, as information on their parents and family members deaths were withheld from them in order to protect them. Fear of recurrence and separation anxiety was related to school refusal. In addition, displacement and within-country migration led to increased demands and pressure on extended family and in some cases led to child sexual abuse. In this paper, lessons from observation of the aftermath of the disaster are described. For health care professionals as well as for lay volunteers, some factors have to be contextualized within the cultural context.


Background: Describing adverse health effects and identifying vulnerable populations during and after a disaster are important aspects of any disaster relief operation. This study aimed to describe the mortality and related risk factors which affected the displaced population over a period of two and a half months after the 2004 Indian
Ocean tsunami in an eastern coastal district of Sri Lanka. Methods: A cross-sectional household survey was conducted in 13 evacuation camps for internally displaced persons (IDP). Information on all pre-tsunami family members was collected from householders, and all deaths which occurred during the recall period (77 to 80 days starting from the day of the tsunami) were recorded. The distribution of mortality and associated risk factors were analysed. Logistic regression modelling using the generalized estimating equations method was applied in multivariate analysis. Results: Overall mortality rate out of 3,533 individuals from 859 households was 12.9% (446 deaths and 11 missing persons). The majority of the deaths occurred during and immediately after the disaster. A higher mortality was observed among females (17.5% vs. 8.2% for males, p < 0.001), children and the elderly (31.8%, 23.7% and 15.3% for children aged less than 5 years, children aged 5 to 9 years and adults over 50 years, respectively, compared with 7.4% for adults aged 20 to 29 years, p < 0.001). Other risk factors, such as being indoors at the time of the tsunami (13.8% vs. 5.9% outdoors, p < 0.001), the house destruction level (4.6%, 5.5% and 14.2% in increasing order of destruction, p < 0.001) and fishing as an occupation (15.4% vs. 11.2% for other occupations, p < 0.001) were also significantly associated with increased mortality. These correlations remained significant after adjusting for the confounding effects by multivariate analysis. Conclusion: A significantly high mortality was observed in women and children among the displaced population in the eastern coastal district of Sri Lanka who were examined by us. Reconstruction activities should take into consideration these changes in population structure.


In 2006, work got under way on a 10-year strategic review of progress since the original Machel study. This ambitious undertaking, financed by the Governments of Australia, Austria, Belgium, Canada, France, Germany, Norway and Sweden, was co-convened by the Office of the Special Representative of the Secretary-General for Children and Armed Conflict and UNICEF. In addition to these two UN bodies, more than 40 UN agencies, nongovernmental organizations and academic institutions contributed to the report, along with children from nearly 100 countries. The initial findings were presented to the General Assembly in October 2007, as part of the annual report of the Special Representative of the Secretary-General for Children and Armed Conflict.3 This publication is a more in-depth look at progress and remaining gaps. It is part of an ongoing advocacy effort to develop a common platform and to keep the cause of children in conflict in the conscience of citizens everywhere. (extract from introduction, R Dunn)


The following paper is based on a review of 31 communications consisting of refereed journal articles, news articles, television interviews, and books. Each communication focused on working with children using art after a disaster. Each communication was analyzed in six key areas: design of communication, theoretical basis of art therapy conducted, environment surrounding art therapy practice, the art therapist, the client, and the artwork. The following patterns emerged: only two communications met the criteria for research studies; the communications described art therapy in short-term crisis situations and longer-term therapeutic settings; it takes strong, resourceful, compassionate, and resilient people to work as art therapists in this setting; art interventions ranged from free choice activities to very structured craft activities; no prevalent theory about working with children emerged. It is concluded that semi-structured art interventions work well with this population, but more reliable research and planning is needed on working with children after a disaster.

The purpose of this study was to examine factors related to the development of posttraumatic stress symptoms in children and adolescents after Hurricane Katrina. It was hypothesized that a positive correlation would exist between trauma exposure variables and symptoms indicating need for mental health services experienced 2 years after Hurricane Katrina. Specifically, the authors hypothesized that experiences associated with natural disaster including personal loss, separation from family and/or community, and lack of community support as well as previous loss or trauma would be related to increased symptomatology in both children and adolescents. This study included 7,258 children and adolescents from heavily affected Louisiana parishes. Measures included the Hurricane Assessment and Referral Tool for Children and Adolescents developed by the National Child Traumatic Stress Network (NCTSN, 2005). Results were generally supportive of our hypotheses, and specific exposure and demographic variables were found to be strongly related to posttraumatic stress symptoms in children and adolescents.


This article extends the discussion of social support for child disaster survivors by providing a case study overview of the primary organization in the United States responsible for caring for young children in the aftermath of natural and human-made disasters: Children's Disaster Services (CDS), which is part of the Brethren Disaster Ministries of the Church of the Brethren General Board. We offer an overview of the history and purpose of the CDS program, describe the training and mobilization process for volunteers, and explain the services that are provided at CDS child care centers. Throughout, we focus on the things that CDS does to help children cope and begin the process of recovery following traumatic events, including designing and maintaining a suitable space for child care activities, participating in play-oriented activities that facilitate a sense of safety and trust, and listening to the stories of children as they process their emotional responses. By offering child-centered care, emotional support, and a sense of normalcy, the CDS program helps meet the immediate needs of children, assists family members who may be overwhelmed as they attempt to deal with the effects of disaster, and plays an important role in fostering resiliency among children.


Adults expend enormous time and energy to keep children safe, but terrorism and catastrophic disasters seem to beg the question: What can our children do to feel empowered to be prepared for a variety of emergency situations? Our small, rural school district has discovered an answer.


The article reports on Plan International's report on children's rights in the wake of the 2004 Indian Ocean Tsunami. Children are among the hardest hit victims of emergencies and natural disasters, and therefore need additional support. Disaster response seldom considers children beyond the immediate provision of their basic needs. The article reports that a holistic approach is required if mental, emotional and social, as well as physical, needs are to be met. Children helped rebuild their communities after the tsunami, and their essential contributions should be recognized and appreciated when planning and initiating disaster relief programs. INSET: Panel: What children who experienced the tsunami from Thailand.

A participatory research action was undertaken in the two largest shelters established after the earthquakes in El Salvador (2001). One hundred fifteen semi-structured interviews were carried out among refugees, which later formed the basis for a self-managed community plan. Comparisons between the two shelters - which differed primarily in whether the grouping of tents was made to reflect the community of origin of the survivors (shelter Santa Gertrudis) or not (shelter El Cafetalón) - showed that refugees in Santa Gertrudis participated more often in community activities, and had more positive emotional memories, fewer feelings of having been humiliated and less emotional discomfort than refugees in El Cafetalón. The results suggest that forms of organisation and management which consider elements of dignity, participation and respect for the capacity of the victims to control their own lives are relevant factors for effective individual and community coping after a catastrophe.

Focus groups were conducted with 23 children and adolescents, aged 9 to 17 years, who relocated from Louisiana to Texas following Hurricane Katrina to explore their disaster, evacuation, and resettlement experiences. The resilience described by some was remarkable and, despite evidence of cultural disparity and stigma, many identified positive aspects of the new communities in which they resided. Attempts to help displaced children must begin with a full understanding of the individual experiences and reactions of those being served rather than being based on assumptions about what may have occurred.

Investigated the responses of middle and high school students exposed to the 1995 Oklahoma City bombing across a spectrum of loss. A questionnaire measuring exposure, personal consequences, initial response, and current posttraumatic stress and other symptoms was administered to 3,218 students 7 wks after the explosion. More than one third of the sample knew someone killed in the explosion. Bereaved youths were more likely than nonbereaved peers to report immediate symptoms of arousal and fear, changes in their home and school environment, and posttraumatic stress symptoms. Retrospective measures of initial arousal and fear predicted posttraumatic stress symptoms at 7 wks. The results support the literature addressing the role of initial response in posttraumatic stress symptoms development. The study raises concerns about the impact of TV, and traumatized youths' reactivity to it, in the aftermath of disaster.

Despite the increasingly dangerous world where trauma and loss are common, relatively few studies have explored traumatic grief in children. The 1998 American Embassy bombing in Nairobi, Kenya, provided an unfortunate opportunity to examine this topic. This report describes findings in 156 children who knew someone killed in the incident, assessed 8 to 14 months after the explosion. Bomb-related posttraumatic stress was associated with physical exposure, acute response, posttraumatic stress related to other negative life events, type of bomb-related loss, and subsequent loss. Grief was associated with bomb-related posttraumatic stress, posttraumatic stress related to other negative life events, and type of bomb-related loss. The study supports the developing literature on traumatic grief and the need for studies exploring the potentially unique aspects of this construct.

A number of logistical issues complicate the conduct of child disaster research. Like studies of adults, much of the child research has used a single cross-sectional assessment of non-representative samples, it fails to consider pre-disaster contribution to post-disaster problems, and it leaps to unwarranted causal conclusions from results providing mere associations. Despite concern about the
accuracy of parental report and concern about children's understanding of certain terms, most child studies have used a single source of information - either the children themselves or their parents. As the field matures, greater attention to the sophistication of research methods and design will increase our understanding of children in the context of disasters.


In July 1993, severe flooding devastated Sarlahi district in Nepal. The next month, a follow-up study of a large population cohort was undertaken. The study is unique in that a prospective research database was used to verify residency prior to the flood and to confirm vital status afterwards. It evaluated 41,501 children aged between two and nine years and adults aged 15-70 in 7,252 households. Flood-related fatality rates were 13.3 per 1,000 for girls and 9.4 per 1,000 for boys, 6.1 per 1,000 for women and 4.1 per 1,000 for men. Flood-related fatality rates for children were six times higher than mortality rates in the same villages a year before the flood (relative risk (RR) = 5.9, 95% confidence interval (CI) 5.0-6.8). Flood-related fatality was associated with low socio-economic status pre-flood (RR=6.4, 95% CI 2.7-20.0), and having a house constructed of thatch (RR=5.1, 95% CI 1.7-24.5).


The document review discusses selected guidelines and recommendations that international actors have formulated as a result of experience providing relief to young children in emergencies. Its purpose is to help develop response plans for future emergencies. The failure to respond to and protect children from escalating threats in emergencies has many consequences including the loss of educational opportunity and a long-term social cost. To prevent these tragedies children's core needs need to be met in safe protected and structured settings, with support for caregivers. Questions addressed in the review include "What are donor agencies' guidelines for responding to young children in emergencies?" and "What can be learnt from these guidelines for future emergencies?" The document review is followed by a discussion of the guidelines and recommendations for the future development of response guidelines.


Investigates types of coping assistance offered by parents, friends and teachers to children after a natural disaster. Assessment of post-traumatic stress disorder; Frequency of ten types of coping strategies; Children's perception of social support from significant others.


Background: Family context can affect children's vulnerability to various stresses, but little is known regarding the role of family variables on children's reactions to natural disaster. This prospective study examined the influence of predisaster observed parenting behaviors and postdisaster parental stress on young children's distress following an earthquake. Methods: Participants were 117 two-parent families with a child age 4-5 at the initial assessment. The families experienced different degrees of impact from the earthquake. Pre-earthquake family context comprised observations of parents' positive and negative behaviors during a parent-child play task. Eight months after the earthquake, mothers reported symptoms of parental stress and children's distress. Results: Earthquake impact and children's distress symptoms were moderately correlated (r = .44), but certain pre-earthquake parental behaviors moderated the relationship. The dose-response association between earthquake impact and children's symptoms did not hold for families in which fathers showed high levels of negative behaviors with daughters, or mothers showed low levels of positive behaviors with sons. In addition, results consistent with full mediation for boys (and partial mediation for girls) indicated that 86% of the total effect of earthquake impact
on boys' distress (and 29% on girls' distress) occurred through the mediator of reported parental stress. Conclusions: These findings demonstrate that young children's responses to an abrupt, negative environmental event, such as an earthquake, are influenced in part by the nature of the parent-child relationship prior to the event as well as by the responses parents exhibit following the event.


This study examined a school-based screening and evaluation project to identify children with adjustment problems following a natural disaster. Six hundred twelve children ranging in age from 5 to 19 were screened in the aftermath of a hurricane and extensive flooding. Two hundred forty-eight children and 86 parents participated in the evaluation phase of the project, although few completed all measures. Severity of exposure alone was a limited predictor of child adjustment. However, screening for depression increased prediction of adjustment, and screening for traumatic stress symptoms helped predict parent-reported child PTSD. Barriers to conducting a school-based screening are discussed.


The issue of children's rights has become key to human rights-based international security strategies. The UN Convention on the Rights of the Child (1989) is being operationalised in complex political emergencies. Children's rights now inform humanitarian principles. Universal concern for children is viewed as transcending political and social divides and able to mobilise societies to confront social problems and prevent war. The operationalisation of child rights is accompanied by the development of psycho-social programmes to rehabilitate the child victim. Critically analysing the implications of the children's rights regime for the right to self-determination, the paper unpacks the assumptions underlying children's rights and psycho-social intervention. The paper begins by examining the conceptualisation of the rights-holding subject universalised under the UN Convention and then goes on to consider Article 39 on the right to psycho-social intervention. Equally important as the novel conceptualisation of childhood and children's rights under the international children's rights regime is the (unspoken) mistrust of adulthood and political rights that informs the imperative to institutionalise children's rights as higher law. Moreover while the rights-based approach consciously sought to move away from the earlier moralising child-salvation model, psycho-social rehabilitation reveals a similar preoccupation with deviancy, but conducted through the paradigm of psychological functionalism. Rather than representing a trend towards more humane international relations, the paper suggests that the elevation of children's rights is premised on a profound disenchantment with humanity. The logical implication of the international children's rights regime is to challenge both the moral and political capacity of individuals and their right to self-determination and to institutionalise a more unequal international system.


In the past few years, there has been a clear focus on the need for citizenship education in Australian schools. The importance of citizenship education for developing intercultural understanding was especially reinforced after observing the racial riots involving young Australians in December, 2005 in the Sydney suburb of Cronulla NSW. This riot highlighted racial issues amongst Australian youth, and disclosed to Australian society that racial prejudice is still entrenched in this society. Although the rioters do not represent the general Australian society, these issues are crucial to be brought into the open through school education. These young people who were involved in the Cronulla riots grew up and went to school in Australia.
Australia is a multicultural society, with a multicultural educational environment, we may need to re-think whether or not school education is heading in the right direction. This qualitative study examines two young mothers’ experiences of their children's schooling. The mothers are from non-Western cultural family backgrounds, raising their children in Australia. Their children attend schools with a high proportion of students from various ethnic backgrounds, in Sydney's southwest. The data from the interviews show how schooling can affect the family's ability to maintain their cultural heritage while becoming members of the Australian community. It also shows the parents' dilemma about being positioned between the Western education system and their non-Western cultural heritage.


The paper outlines psychosocial interventions in providing care and support to disaster-affected communities. Any impact of disaster can be looked at in two ways: firstly by ascertaining the characteristics of the event itself, and secondly, how that event is appraised by those affected. Depending on different phases of the impact of the disaster, individuals will respond in different styles. Psychosocial interventions must be tailored to address the needs of the target population, with special attention paid to vulnerable groups such as children, women and the elderly. These should also be modulated according to the phase of recovery following the event occurrence because each phase will highlight different needs. The four phases of intervention, although determined separately, may show an overlap. In the initial phases, the emphasis is on social intervention that can be delivered by community-level workers. In the later phases, the psychological issues that emerge necessitate the services of trained professionals. Initial social care will need to give way to psychological care, and on occasion both will need to be combined for a considerable period. Since psychosocial care is a long-term, continuous process, disaster management and preparedness programmes must invest in training for capacity building by training community workers and primary care health professionals.


Focuses on the needs and coping strategies of the urban poor in Dhaka City, Bangladesh during the 1998 floods. Situation in affected areas; Vulnerability of the poor due to homelessness; Difficulties faced by women and children during the flood; Lack of sanitation facilities; Scarcity of drinking water; Unemployment; Incidence of domestic violence; Suspension of loan repayments.


The WHO Department of Child and Adolescent Health and Development supported this review as the second in a series to guide interventions to improve the health, growth and psychosocial development of children, particularly those living in resource-poor settings. The first in the series is A Critical Link: Interventions for physical growth and psychological development (1999, WHO/CHS/CAH/99.3), available in English, French, and Russian. This review lays the groundwork for including interventions to improve the relationship between the caregiver and child in an overall strategy to improve the child's survival, health, and development. From recent research, the review identifies two fundamental qualities that determine the caregiver's ability to provide effective care: sensitivity and responsiveness to the child. These skills enable the caretaker to detect the child's signals and to respond appropriately, in synchrony, to meet the child's needs.

Second, the review summarizes what we have learned about how a strong and supportive caregiving relationship supports the development of a child who is physically, intellectually and socially healthy, and more resilient to the damaging effects of poverty and violence. The review shows us what it looks like when this relationship works, and identifies the consequences when the caregiver and child fail to engage. The most vulnerable children – those who are premature, low birth weight, non-organic failure to thrive, and malnourished – are the ones to suffer the most from the effects of this failure on the child’s health. We also see the human cost on
children living in institutions, conflict, refugee camps and other settings that deprive them of stable, caring relationships. Finally, this review calls us to work with the whole child and with the child’s closest caring environment. It presents a solid foundation for the need to integrate interventions to promote better caregiver-child interactions into the design of primary health care programmes for mothers, other caregivers, newborns, and young children. These interventions are also appropriate for community-based nutrition, early child care, violence prevention, orphan care and parent education programmes.

(Extracted from introduction - RD)


This article examines the project "The Saddest Days: Katrina Experiences Through the Eyes of Children." developed by the authors. The project uses the Gao School Museum (GSM) approach to develop instructional material that includes student experiences and voices. Specifically, the authors investigated how the "Saddest Days" Project, using the GSM methodology, develops Bon Feerey (a concept in the Songhay language that means "the process of opening one's mind and accepting new ideas and approaches so as to integrate these new perspectives into one's daily life"), which urges students and teachers to ponder how Katrina's aftermath continues to affect African American youth. The disaster has affected not only African American youth from New Orleans but also those teachers and students located in the cities in which New Orleanians are hosted.


This paper combines the findings of research aimed at assisting children, youth, and families to more effectively cope with the effects of disasters with a review of the relevant literature. We briefly review the effects of disasters on children, summarizing theory and research on risk and protective factors, interventions following a hazardous event, and promoting children’s resilience. We also look at the role of preventive interventions in assisting children and their families to prepare both physically and psychologically for disasters. Finally, we summarize findings from evaluation of school-level hazards education programs in New Zealand. Based on promising research to date, we highlight factors that may underpin hazard intervention effectiveness.


An important aspect of crisis counseling is linking survivors with services for their unmet needs. We examined determinants of referrals for disaster relief, additional crisis counseling, and psychological services in 703,000 crisis counseling encounters 3-18 months after Hurricane Katrina. Referrals for disaster relief were predicted by clients' losses, age (adults rather than children), and urbanicity. Referrals for additional counseling and psychological services were predicted by urbanicity, losses and trauma exposure, prior trauma, and preexisting mental health problems. Counseling and psychological referrals declined over time despite continuing mental health needs. Results confirm large urban-rural disparities in access to services.


Background: This evaluative study assesses the efficacy of a school-based secondary prevention program consisting of creative expression workshops for immigrant and refugee preschoolers in a predominantly South Asian multiethnic neighborhood. Coincidentally, the program began in the wake of the tsunami. Method: Pretest and posttest data were collected from the parents and teachers of 105 preschoolers in 10 classes randomly assigned to an experimental or
control status. The parents' and teachers' versions of the Strengths and Difficulties Questionnaire were used to assess the children's mental health. The family's ethnic origins and premigration experiences of organized violence were considered in the analysis. Results: According to both the teachers' and parents' reports, the children in the experimental group benefited moderately from the program, which appeared to reduce the SDQ global score of children whose families had experienced violence in their homelands (t(21) = 3.83, p = .001 (MT1 = 12.81, MT2 = 9.59)), in particular those from South Asia. Conclusion: This study provides some evidence that immigrant preschoolers whose families have experienced adversity before migration can benefit from the creative expression workshops. Further studies are needed to determine if this program can help address the effects of mass media exposure to a disaster or traumatic event on vulnerable communities.


Analysis of the research evidence, field notes and agency guidelines relating to the effective provision of interventions targeted at 3-6 year old children in “child friendly spaces” (CFS) in fragile situations concomitant with natural disasters and armed conflict. The recurring themes arising from the analysis were that while CFSs provide important physical space for play and other activities but that the early years expertise of agency staff is lacking. Ruskin recommends the recruitment of early years professionals and a clearer direction for advocacy. The study highlights the limited evaluation of EFS’ impact on children and the need to investigate the tensions that can arise between communities and agencies in relation to community ownership, cultural appropriateness and the new concepts that these early childhood interventions may introduce. (Summary by R Dunn)


Psychological First Aid (PFA) consists of a systematic set of helping actions aimed at reducing initial post-trauma distress and supporting short- and long-term adaptive functioning. Designed as an initial component of a comprehensive disaster/trauma response, PFA is constructed around eight core actions: contact and engagement, safety and comfort, stabilization, information gathering, practical assistance, connection with social supports, information on coping support, and linkage with collaborative services. PFA for children and adolescents focuses on these same core actions, with modifications to make them developmentally appropriate. Formal evaluation of the effectiveness of PFA is needed and it is hoped that development of a PFA Field Operations Guide will facilitate such evaluation.


Objective. The goal was to assess stress reactions in young children during and after war and the effects of a new brief intervention. Methods. Two separate studies were conducted. In study I, we assessed war exposure and stress reactions of 74 children (2-7 years of age) in a sheltered camp during the second Israel-Lebanon war (July to August 2006). Their exposure to war experiences and their stress reactions were assessed through parental reports during the last week of the war. In addition to standard care, 35 children received a brief intervention (Huggy-Puppy intervention) aimed at encouraging them to care for a needy Huggy-Puppy doll that was given to them as a gift. The effects of the Huggy-Puppy intervention were assessed in a follow-up interview 3 weeks after the war. Study II assessed the efficacy of group administration of the Huggy-Puppy intervention to 191 young children, compared with 101 control subjects. The effects of the intervention on stress-related symptoms after the war were assessed in telephone interviews with the parents. Results. Study I indicated that, during the war, most children had significant exposure to war-related experiences and had severe stress reactions. The Huggy-Puppy intervention was associated with significant reductions in stress reactions in the postwar assessment. A higher level of attachment and involvement with the doll was associated with better outcomes. The results of study II indicated
that group administration of the Huggy-Puppy intervention was associated with significant reductions in stress reactions. CONCLUSION. These studies suggest that the Huggy-Puppy intervention may offer pediatricians and other child health care professionals a promising, cost-effective intervention for children during stressful times.


This article studies extreme life events and catastrophic experiences and the development of attachment across the life span. Unfortunately a large number of children and their families are exposed to extreme adverse life events and even catastrophic experiences during the course of their development. Such devastating experiences might undermine the quality of parent-child relationships, subsequent child-adult attachment relationships and surviving adult individuals’ states of mind with regard to attachment.


The authors describe their study of posttraumatic stress symptoms of children and adolescents after the 1999 earthquakes in Turkey. The rate of possible PTSD cases is also presented. The findings are reported as the results of two different studies. Location had a main effect on almost all of the dependent variables for both samples. The posttraumatic stress symptom scores for both groups significantly decreased 3 months after the initial assessment. The best predictors of the perceived posttraumatic stress symptoms for both children and adolescents were found to be perceived negative school performance and exposure.


This study evaluated a community-based grief and trauma intervention for children conducted postdisaster. Fifty six children (7 to 12 years old) who reported moderate to severe levels of symptoms of posttraumatic stress were randomly assigned to group or individual treatment. Treatment consisted of a manualized 10-session grief- and trauma-focused intervention and a parent meeting. Measures of disaster-related exposure, posttraumatic stress symptoms, depression, traumatic grief, and distress were administered at preintervention, postintervention, and 3 weeks postintervention. There was a significant decrease in all outcome measures over time, and there were no differences in outcomes between children who participated in group intervention and those who participated in individual intervention. Results suggest that this intervention using either treatment modality may be effective for addressing childhood grief and trauma postdisaster.


This handbook will guide Save the Children emergency response personnel and implementing partners in the rapid implementation of effective Child Friendly Spaces for children during and immediately after an emergency such as a natural disaster or situation of armed conflict. This handbook is meant for staff who have limited experience with Child Friendly Spaces programming in emergency situations, as well as for more experienced staff who would like to strengthen their understanding and expand their skills by using additional resources and tools. The first part of this handbook is an Overview of Child Friendly Spaces. It includes nine sections that give a general introduction to Child Friendly Spaces and highlight key concepts and guidance for developing and implementing Child Friendly Spaces. The sections include an introduction to Child Friendly Spaces and how they can provide care and support to children in emergencies; components of Child Friendly Space activities (assessment/plan, site selection, safety/security, activities, and
monitoring and evaluation); staffing; materials/equipment; and transitioning from the emergency phase.
The second part of this handbook is an annex of 40 Implementation Tools and Resources.
(Extracted from Introduction - RD)

In the immediate aftermath of a disaster, education can help protect children from death or bodily harm. It can impart critical lifesaving information on simple hygiene and health issues that have emerged as a result of the emergency or the dangers of unexploded ordinance. Children who are in school may be less vulnerable to being recruited into armed groups or being trafficked. Education can also reduce the effects of trauma and offer children a sense of normality, structure and hope for the future. And it is what children and their families demand. Over the longer term, quality education can be a critical ingredient in the reconstruction of post-conflict societies. Quality education can promote conflict resolution, tolerance and a respect for human rights. And quality education can increase children’s earning potential, enable them to keep their families healthier and improve their ability to break out of the poverty cycle. International awareness of the potential value of education as a source of protection in emergencies and as a key to development is growing. At the United Nations Millennium Summit in September 2000, world leaders adopted the Millennium Development Goals (MDGs), the second of which is the commitment that, by the year 2015, all boys and girls worldwide will be able to complete a full course of primary schooling, defined as the first five years of formal education. Building on the MDGs, the Interagency Network for Education in Emergencies (INEE) developed minimum standards for education in emergencies, chronic crises and early reconstruction. These standards promote consistency in education programming. In November 2006, education was included in the international humanitarian response system through the formation of the Global Education Cluster, lead by UNICEF and Save the Children, which is designed to enhance coordination, improve accountability and bring quality, effective emergency response education programming to disaster and conflict-affected populations worldwide. This new report from Save the Children demonstrates that it is possible to provide quality education even in the midst of conflict and that, while the international community is beginning to meet the challenge, there is much more that can be done if donor governments would rise to the occasion. (Extracted from Exec Summary - R Dunn)

Save the Children (no date). Promoting psychosocial well being among children affected by armed conflict and displacement: Principles and approaches. Working Group on Children Affected by Armed Conflict and Displacement, Save the Children.
The paper is organised in the following way: first, it provides background, discussing some of the major psychological and social effects of warfare on children; then it suggests — in the main section — principles for programs to promote the well-being of war-affected children; and, finally, there is a summary and conclusions. There are two annexes, the first naming those who contributed and the second listing a selection of relevant literature produced mainly by, or in collaboration with, Alliance members.

This study examined symptoms of Posttraumatic Stress Disorder (PTSD) in children indirectly exposed to September 11 via television, the Internet, and printed media. Approximately 1 month after the attacks, 179 students in Grades K-5 at four Southeastern elementary schools and their parents were surveyed about their experiences and reactions. The Pediatric Emotional Distress Scale (PEDS), the Parent Report of Post-Traumatic Symptoms (PROPS), and the Children’s Report of Post-Traumatic Symptoms (CROPS) were used to assess for PTSD symptoms. More PTSD symptoms were reported in children who saw reports on the Internet (vs. television/printed media), saw images of death or injury, or feared that a loved one might have died in the attacks. There was no measurable benefit to seeing heroic or
“positive” images. Older children and boys had greater media exposure and more trauma-specific PTSD symptoms. Implications for those striving to deliver appropriate amounts and types of information to children and families following disasters are discussed.


Hurricane Katrina dramatically altered the level of social and environmental stressors for the residents of the New Orleans area. The Family Stress Model describes a process whereby felt financial strain undermines parents’ mental health, the quality of family relationships, and child adjustment. Our study considered the extent to which the Family Stress Model explained toddler-aged adjustment among Hurricane Katrina affected and nonaffected families. Two groups of very low-income mothers and their 2-year-old children participated (pre-Katrina, n = 55; post-Katrina, n = 47). Consistent with the Family Stress Model, financial strain and neighborhood violence were associated with higher levels of mothers’ depressed mood; depressed mood was linked to less parenting efficacy. Poor parenting efficacy was associated to more child internalizing and externalizing problems.


This paper describes the clinical and research evidence for the importance of the relational context of posttraumatic stress disorder in young children. We review 17 studies that simultaneously assessed parental and child functioning following trauma. In many studies, despite limitations, an association between undesirable parental/family variables and maladaptive child outcomes has been consistently found. We present a model of the parental/family variables as moderators and vicarious traumatic agents for symptoms in young children. Also, a Compound Model is proposed, with three distinctive patterns of the parent-child relationship that impact on posttraumatic symptomatology in young children. Implications for clinical practice and research directions are discussed.


Recent crises in regions where exclusive breastfeeding is not the norm have highlighted the importance of effective policies and guidelines on infant feeding in emergencies. In 1993, UNICEF compiled a collection of policy and guideline documents relating to the feeding of infants in emergency situations. In June 2000 Save the Children, UK, UNICEF and the Institute of Child Health undertook a review of those documents, updating the list and identifying the common ground that exists among the different policies. The review also analysed the consistency of the policy framework, and highlighted important areas where guidelines are missing or unclear. This article is an attempt to share more widely the main issues arising from this review. The key conclusions were that, in general, there is consensus on what constitutes best practice in infant feeding, however, the lack of clarity in the respective responsibilities of key UN agencies (in particular UNICEF, UNHCR and WFP) over issues relating to co-ordination of activities which affect infant-feeding interventions constrains the implementation of systems to support best practice. Furthermore, the weak evidence base on effective and appropriate intervention strategies for supporting optimal infant feeding in emergencies means that there is poor understanding of the practical tasks needed to support mothers and minimise infant morbidity and mortality. We, therefore, have two key recommendations: first that the operational UN agencies, primarily UNICEF, examine the options for improving co-ordination on a range of activities to uphold best practice of infant feeding in emergencies; second, that urgent attention be given to developing and supporting operational research on the promotion of optimal infant-feeding interventions.
Shaarani, E. (2007). "The role of parents in difficult circumstances." Qatran nada (10): 15-19. Discusses the role of parents in supporting children living in or experiencing difficult circumstances and provides strategies for parents to address common symptoms of trauma. Instances where specialist help is required are outlined. (RD)

Shaw, J. A. (2000). "Children, Adolescents and Trauma." Psychiatric Quarterly 71(3): 227. This paper presents an overview of the psychological effects of trauma on children and adolescents with specific attention to the epidemiology of traumatic experiences, risk factors, developmental effects, the types of traumatic experiences albeit a single event trauma or a chronic process trauma, the spectrum of clinical presentations, psychiatric and psychological comorbidities as well as assessment and therapeutic principles. In addition to the child's psychological response to the traumatic stressor communities are often devastated by natural or man made disasters. The interactions between the child's response with the family and community response as well as community interventions are discussed.

Shaw, J. A., B. Applegate, et al. (1996). "Twenty-one-month follow-up study of school-age children exposed to Hurricane Andrew." Journal of the American Academy of Child & Adolescent Psychiatry 35(3): 359-364. Explored a 21 mo followup of posttraumatic stress symptomatology (PSS) and psychological morbidity in 30 school-age children (aged 7-13 yrs) after exposure to Hurricane Andrew. Ss initially evaluated at 2 and 8 mos after the hurricane were administered Pynoos's Posttraumatic Stress Disorder Reaction Index (R. S. Pynoos, 1987) to assess the degree of PSS, and their teachers completed the Teacher's Report Form (T. M. Achenbach and C. Edelbrock, 1986) to rate various student behaviors at 21 mos. 70% of the Ss endorsed moderate-severe PSS. Psychopathology indices increased over the 19 mo period. Boys were more withdrawn, had increased social and attention problems, and internalized symptoms. Girls showed an increase in anxiety/depression. The enduring effects of disaster associated with secondary stressors and "traumatic reminders" are etiologically important for continuing psychological morbidity.

Shelby, J. S. and M. G. Tredinnick (1995). "Crisis Intervention with Survivors of Natural Disaster: Lessons from Hurricane Andrew." Journal of Counseling & Development 73(5): 491-497. Crisis intervention has typically been conceptualized as seeking a return of clients to a state of equilibrium. Our work with Hurricane Andrew survivors in south Florida, as part of the Disaster Mental Health Services team of the American Red Cross, has led us to appreciate the importance of several further considerations. In our work, we developed a proactive approach, attempting to recognize and extend clients' preexisting strengths. We offer a number of pragmatic interventions, focusing particularly on children's issues and we draw attention to sensitive multicultural issue.

Shen, Y.-J. (2002). "Short-term group play therapy with Chinese earthquake victims: Effects on anxiety, depression and adjustment." International Journal of Play Therapy 11(1): 43-63. Investigated the effectiveness of short-term child-centered group play therapy in elementary school settings with Chinese children in Taiwan who experienced an earthquake in 1999. 65 children (aged 8-12 yrs) were screened. Children in the experimental group scored significantly lower on anxiety level and suicide risk after play therapy than did children in the control group. The effects of the treatment support previous studies of play therapy with American children. These findings reveal the possibility of disaster intervention services adopting Western helping techniques with school children of non-Western cultures.


This paper focuses on Hutu refugees from Burundi who, as a consequence of the mass killings in Burundi in 1993, were forced into Tanzanian exile. The actors in the study are the refugee teachers who have participated in the development of the educational programme in Lukole refugee camp in Ngara, Tanzania. The aim of the research was to explore Burundian Hutu refugees’ experiences of exclusion from education in Burundi, and how this in turn has motivated education in Tanzanian exile. Before this could be accomplished, the need was recognized to investigate socio-political causes of the refugee situation, with special reference to education. As an illustration of how societies develop disasters like those witnessed in Burundi, a 'disaster model' is presented. What is revealed is that the Hutu majority has been systematically discriminated against and excluded from any post-primary education. The educational system in Burundi has, furthermore, been the arena for ethnical-political tension that has repeatedly escalated into violence. As a consequence, sending Burundian Hutu children to school was in many cases seen as a 'risk'. Given the testimonies of the refugee teachers, this fact also affected the refugee community in Tanzania and their willingness to send their children to school in the camp.


To share life experiences, we must learn to communicate about them in ways that are meaningful to others. Through cognitive restructuring, cognitive distortions are systematically addressed; the child is helped to co-construct more useful attributes to the memories. Expressive therapy involving the arts can help children to visually and verbally articulate feelings regarding traumatic events. The arts bond human beings through the universal, symbolic communication of common experiences. Curriculum that encourages this type of sharing through international exchange of the images and writings of children may extend beyond the individual reconciliation to a more global reconciliation. Therapeutic processing must emanate from the child, rather than superimposing an adult-centric resolution over a child's interpretation of reality. In situations of disaster, whether induced by humans or nature, children require opportunities to share their thoughts and concerns; children also require opportunities to practice rationalization and resilience. Through listening to the voices of the children, observing their enactments, reading their words, and seeing their images, we might consider that the healing of our trauma, both individual and global is requisite to the ability to learn, to develop, to grow. (Extract from final paragraph - R Dunn)


OBJECTIVES. The purpose of this work was to evaluate the cognitive and social-emotional consequences in a general population of primary school children affected by the firework disaster in Enschede, the Netherlands, on May 13, 2000. The explosions caused tremendous damage in the surrounding neighborhood. Twenty-two people immediately died and &gt; 1000 were injured. METHODS. This retrospective study assessed school performance and social-emotional behavior before and up to 3 years after the disaster. Objectively measured school test results in spelling and arithmetic/mathematics and multi-informant social-emotional behavioral assessments were compared between exposed and nonexposed primary school children. Multivariate logistic-regression was used to assess the relationship between exposure and cognitive and social emotional functioning. RESULTS. On school performances, the children exposed to the disaster performed over a period of 3 years after the disaster as good as or better than classmates, controls, and a national reference population. Shortly after the disaster, exposed children even seemed to have better school test results than nonexposed children. Two to 3 years after the disaster, a significant effect of disaster exposure was found on social-emotional behavior. Problematic behavior was reported by teachers, parents, and the school doctor. CONCLUSIONS. This study demonstrates a limited influence of disaster exposure on school performance in primary school children. This study also
shows that teachers and youth health care practitioners especially should be aware of children starting school several years after a disaster. Although very young at the time of a disaster (1-4 years of age), they may experience disaster-related problems.


Discusses the impact of disasters on the psychological health of children in the United States. Criteria for diagnosing post-traumatic stress disorder (PTSD); PTSD symptomatology in children; Implications for emergency management and emergency medical personnel working with children who have been exposed to disasters.


This training module, Disaster Assessment, is designed to introduce this aspect of disaster management to an audience of UN organization professionals who form disaster management teams, as well as to government counterpart agencies, NGOs and donors. This training is designed to increase the audience’s awareness of the nature and management of disasters, leading to better performance in disaster preparedness and response. The content has been written by experts in the field of disaster management and in general follows the UNDP/UNDRO Disaster Management Manual and its principles, procedures, and terminology. However, terminology in this field is not standardized and authors from different institutions may use the same terms in slightly different ways.


Background: To help improve incident preparedness this study assessed socio-demographic and socio-economic predictors of perceived risk of terrorism within Australia and willingness to comply with public safety directives during such incidents.

Methods: The terrorism perception question module was incorporated into the New South Wales Population Health Survey and was completed by a representative sample of 2,081 respondents in early 2007. Responses were weighted against the New South Wales population. Results: Multivariate analyses indicated that those with no formal educational qualifications were significantly more likely (OR = 2.10, 95%CI:1.32-3.35, p < 0.001) to think that a terrorist attack is very or extremely likely to occur in Australia and also more likely (OR = 3.62, 95%CI:2.25-5.83, p < 0.001) to be very or extremely concerned that they or a family member would be directly affected, compared to those with a university-level qualification. Speaking a language other than English at home predicted high concern (very/extremely) that self or family would be directly affected (OR = 3.02, 95%CI:2.02-4.53, p < 0.001) and was the strongest predictor of having made associated changes in living (OR = 3.27, 95%CI:2.17-4.93, p < 0.001). Being female predicted willingness to evacuate from public facilities. Speaking a language other than English at home predicted low willingness to evacuate. Conclusion: Low education level is a risk factor for high terrorism risk perception and concerns regarding potential impacts. The pattern of concern and response among those of migrant background may reflect secondary social impacts associated with heightened community threat, rather than the direct threat of terrorism itself. These findings highlight the need for terrorism risk communication and related strategies to address the specific concerns of these subgroups as a critical underpinning of population-level preparedness.


Children's behavior was assessed with 3 cross-sectional random-digit-dial telephone surveys conducted 11 months before, 4 months after, and 6 months after September 11, 2001. Parents reported fewer behavior problems in children 4 months after the attacks compared with the pre-September 11 baseline. However, 6 months after the attacks, parents' reporting of behavior problems was comparable to pre-September 11 levels. In the 1st few months after a disaster, the identification of children who need mental health treatment may be complicated by a dampened behavioral
response or by a decreased sensitivity of parental assessment to behavioral problems.


Examined the duration of emotional and behavioral problems among children (aged 2-6 yrs) 14 mo after they had experienced hurricane Hugo and assessed factors that predicted longevity of these problems. Mothers of Ss who had experienced the storm provided information on their children's behavioral problems, trauma symptoms, effects of the hurricane, life stressors, and duration of symptoms; this information was compared with information provided by mothers of control children (aged 2-10 yrs) who had not experienced the storm. Ss who had experienced the storm showed significantly higher anxiety and withdrawal and more behavior problems than did children who had not. Behavioral problems decreased steadily over the 6 mo following the storm. Mothers' distress in the hurricane's aftermath was associated with longevity of their children's emotional and behavioral difficulties.


Youth exposed to disasters experience stress and adjustment difficulties, which likely influence their interactions with peers. In this study, we examined changes in bullying and peer victimization in two cohorts of children. Youth from an area affected by Hurricane Katrina were assessed pre and post disaster (n = 96, mean [M] = 10.9 years old, 53% female), and a comparison group from a nearby area was assessed over the same time interval 1 year prior (n = 120, M = 10.2 years old, 52% female). Within the hurricane group, relations between symptoms of post-traumatic stress disorder (PTSD) with bullying and victimization also were examined. Following the hurricane, the hurricane group reported increased relational and overt bullying relative to the non hurricane group, and PTSD symptoms predicted increased victimization. Thus, school personnel should be vigilant and prepared to respond to increased bullying following disasters and for increased victimization in youth experiencing PTSD symptoms.


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


The Child and Adolescent Trauma Treatments and Services Consortium (CATS) was the largest youth trauma project associated with the September 11 World Trade Center disaster. CATS was created as a collaborative project involving New York State policymakers; academic scientists; clinical treatment developers; and routine practicing clinicians, supervisors, and administrators. The CATS project was established to deliver evidence-based cognitive-behavioral trauma treatments for children and adolescents affected by the September 11 terrorist attack in New York City and to examine implementation processes and outcomes associated with
delivery of these treatments. Referrals were obtained on 1,764 children and adolescents; of these, 1,387 were subsequently assessed with a standardized clinical battery and 704 found to be eligible for services. Ultimately 700 youth participated in the project. Treatments were delivered in either school or clinic settings by clinicians employed in 9 provider organizations in New York City. All participating clinicians were trained on the cognitive behavioral therapy models by the treatment developers and received case consultation for 18 months by expert clinician consultants and the treatment developers. The challenges of mounting a large trauma treatment project within routine clinical practices in the aftermath of a disaster and simultaneously evaluating the project have been significant. We outline the major challenges, describe strategies we employed to address them, and make recommendations based on critical lessons learned.


Part of a collaborative project between the Turkish State Planning Organization and the World Bank to contribute to social and welfare policy debate and development in Turkey. Finds that poverty is still fundamental to the life chances of young children and that girls are still particularly vulnerable to malnutrition and limited education. Provides two simulation models to assess the potential benefits of selected ECD policies, including parenting and preschool programs. (RD)


Imagine that a cyclone is coming, but that those living in the affected areas do nothing or too little to protect themselves. This is precisely what happened in the coastal state of Orissa, India. Individuals and communities living in regions where natural hazards are a part of daily life develop strategies to cope with and adapt to the impacts of extreme events. In October 1999, a cyclone killed 10,000 people according to government statistics, however, the unofficial death toll is much higher. This article examines why such a large loss of life occurred and looks at measures taken since then to initiate comprehensive disaster-preparedness programmes and to construct more cyclone shelters. The role of both governmental organisations and NGOs in this is critically analysed. The good news is that, based on an assessment of disaster preparedness during a small cyclone in November 2002, it can be seen that at community-level awareness was high and that many of the lessons learnt in 1999 were put into practice. Less positive, however, is the finding that at the state level collaboration continues to be problematic.


The psychosocial effects of an earthquake which occurred in Newcastle, Australia in 1989 arc the focus of the Quake Impact Study, a four-phase community survey conducted over 2 years. Comparisons were made between adults aged less than 65 years (N = 2371) and those aged 65 years and older (N = 636). Results revealed that older subjects reported fewer threat and disruption experiences and used fewer general and disaster-related support services. However, older subjects reported higher overall levels of post-traumatic stress symptoms on the Impact of Event Scale (IES) compared with younger subjects. On both the IES and a general measure of morbidity (General Health Questionnaire: GHQ-12) the effects of earthquake exposure were more marked among the elderly. Within the older group, subjects who had high levels of posttraumatic stress symptoms (IES > 25, N = 117) were more likely to be female, report higher levels of exposure and use behavioural and avoidance coping styles. Although psychological distress declined with time, post-traumatic stress symptoms remained higher for the high exposure group throughout the study. We conclude that older people may be more at risk for experiencing post-traumatic stress reactions despite having fewer disaster-related experiences. They may also underutilize support services following a disaster. Older women in particular and people with an avoidance coping style appear to be most vulnerable.

Meta-analyses of studies yielding sex-specific risk of potentially traumatic events (PTEs) and posttraumatic stress disorder (PTSD) indicated that female participants were more likely than male participants to meet criteria for PTSD, although they were less likely to experience PTEs. Female participants were more likely than male participants to experience sexual assault and child sexual abuse, but less likely to experience accidents, nonsexual assaults, witnessing death or injury, disaster or fire, and combat or war. Among victims of specific PTEs (excluding sexual assault or abuse), female participants exhibited greater PTSD. Thus, sex differences in risk of exposure to particular types of PTE can only partially account for the differential PTSD risk in male and female participants.


Assesses the role of the community in helping children in disaster. Impact of disasters on children; Effects of disasters on communities; Suggestion to include rapid assessment of social structures and local expertise in disaster response.


Even minor physical trauma can lead to significant psychological difficulties in children and adolescents, which are often overlooked. Their immediate reactions include behavioural, emotional and cognitive difficulties. Their thinking about the world can be disrupted, leading to further problems. Initial reactions can have a further knock-on effect, with significant consequences sometimes leading to an impact upon their adult personality. Major disaster plans should include a psychosocial aspect. Immediately following trauma, children should be re-united with their carers or a familiar adult as soon as possible. They should be offered an age-appropriate, careful explanation of what has happened to them and what their treatment involves. Routine screening for psychological problems may help to prevent chronic psychological sequelae. Various treatments are available for psychological problems that persist.


The case studies presented in this volume were selected to represent a wide range of education initiatives found in conflict and post-conflict countries. They focus on early childhood, primary, secondary, technical/vocational, or non-formal education, as well as parent education, teacher training, bilingual education, and training for ex-combatants. Some of the initiatives include special topics such as trauma healing, conflict resolution, and human rights and citizenship education. The following criteria were used to select the programs to be studied:

• Formal or non-formal education programs or policy planning processes for education during and after conflicts that are not only promising, but evidence-based
• Education programs that are integrated to some degree with programs in other sectors aimed at reconstructing society: income generation, community development, social or environmental protection, health, nutrition, strengthening civil society, local governance, and the like
• Policies and programs developed and managed by national or local organizations.

(extracted from Introduction RD)

Chapter 5: Programs for 3-6 year old children in refugee camps in Indonesia, developed by local community with parents, self funding with minimal resources. Provision of parent education and support and conflict resolution strategies.

We explored the prevalence of posttraumatic stress disorder (PTSD) and its relation to demographic characteristics and other risk factors for developing PTSD in a large sample (N = 910) of earthquake survivors living in tent city. Twenty-five percent of the sample met DSM-IV criteria for PTSD assessed with the Posttraumatic Stress Disorder Self Test (PTSD-S). Peritraumatic factors explained the most variance when the risk factors were grouped as demographics, pretraumatic, peritraumatic, and posttraumatic. The study emphasized that PTSD among the earthquake victims was as prevalent in Turkey as after disasters in other developing countries but higher than usually found after disasters in developed countries, and there was a relation between some factors"mostly peritraumatic"and PTSD.


This edition of Progress for Children, the eighth in the series that monitors progress towards the Millennium Development Goals (MDGs), is a compendium of data that serves as a report card on global and national efforts to protect the rights of children. (Extract from A Veneman's foreword - R Dunn)


This latest edition of UNICEF's Humanitarian Action Report highlights 28 of the most pressing crises. It explains how UNICEF is partnering with others to save lives and rebuild families and communities. And it appeals for US$1.2 billion to allow this lifesaving work to continue in a predictable, timely, and effective manner. (Extract from Ann Veneman's introduction - RD) Highlights the effects of climate change, associated economic threats, the changing nature of armed conflict with a particular focus on how these all affect women and children. 28 country chapters highlight how UNICEF is working with civil society, government authorities, the private sector and donors to respond to emergencies, support recovery, build capacities and strengthen systems to protect children and women. (annotation - RD)


Explains the reproductive health needs and risks of populations affected by disasters and displacement, including prenatal care and safe childbirth for pregnant women and their babies.


The article presents the mental health and psychosocial support guidelines for emergency. The guidelines developed by the Inter-Agency Standard Committee (IASC) aim to promote psychosocial well being and cure mental illness with a structure consistent on communicable diseases and gender-based violence documents. It also emphasizes the significance of mobilizing groups of disaster-affected people to create their own supports and join in the relief scheme. The guidelines are seen to be essential when emergency cases occur.


As a vulnerable group, children are more prone to experiencing trauma and its sequelae. After the Asian tsunami we set out to evaluate the effect of exposure to the tsunami nearly one year after the event and to explore the family history of psychopathology on the mental health of children. This community-based study of 230 children was conducted in Srinivasapuram, a coastal village in Tamil Nadu. A youth self-report form (YSR) of the Child Behaviour Checklist (CBCL), exposure to the tsunami, post-traumatic stress disorder (PTSD) and family history of psychopathology were assessed. The severity of exposure to the tsunami correlated with anxiety and somatic domains of the DSM IV and PTSD symptoms. Family history
of psychopathology correlated with affective and somatic symptoms. Multiple regression analysis revealed that family psychopathology influenced affective problems (R² = 0.071 (n = 199), F = 15.13, p = 0.00) while exposure to the tsunami influenced anxiety problems (R² = 0.046 (n = 208), F = 9.91, p = 0.002). The findings from this study reveal that targeted specialized mental health services are needed for children with severe exposure to the tsunami and positive family history of psychopathology.


Children are uniquely vulnerable in the context of a major natural disaster like tsunami. Post disaster intervention studies in children are few, especially from developing countries like India. An intervention programme for children was developed and conducted at Srinivasapuram, a coastal hamlet in Chennai, a year after tsunami. Sixty-five children who participated in all the six intervention modules were compared to 70 children who did not participate in the intervention. All the children were assessed before and after intervention using the Youth Self Report (YSR) form of Child Behaviour Check List (CBCL) in addition to PTSD symptoms. Children in the two groups were comparable in socio-demographic factors and exposure to tsunami. Prevalence of family psychopathology was more in the intervention group. Only hyperactivity problems were significantly reduced after intervention (z = 2.41 p = 0.016). Children in the intervention group appreciated expression of positive emotions (F = 8.044 p = 0.005) and were also more likely to desist from smoking (F = 6.102 p = 0.003) compared to the control group. The majority of the children are likely to be resilient and only children with pre-existing vulnerability require specific and specialized interventions.


Abstract Objectives: To study posttraumatic disorders in children who were directly and indirectly involved in an industrial disaster; to assess the respective impact of traumatism exposure, parental disorders and sociodemographic variables on the posttraumatic disorders of the children. Methods: The children were assessed with self-administered questionnaires (STAIC, CDI, IES) and questionnaires filled in by parents (CPRS, CBCL). Parents were assessed with the GHQ-28. Forty-three exposed children were compared with 44 children who were exposed to the same risk (indirectly exposed group) and with a control group of 50 unexposed children. Results: The exposed group obtained significantly higher anxiety and trauma-related scores than the control group and the threatened group, as well as higher scores of behavioural symptoms and of parental disorders. Indirectly exposed children did not have higher rates of symptoms than control children. The younger exposed children exhibited the highest psychopathological scores. Low sociodemographic status was associated with more disorders. There were no differences on questionnaire scores between girls and boys. Children's disorders correlated with disorders in both parents; but this only accounted for part of the variance, a finding which supports the hypothesis of a direct impact of the trauma on the child, irrespective of parental clinical status, SES of the family, children's age and gender. Conclusions: Children's and parents' disorders interact in a complex fashion which needs further study.


Disasters affect segments of the population in different ways. Although age-based vulnerabilities place children at risk, children may offer unique capacities for bolstering disaster resilience. This paper reviews three initiatives that focus on children and disasters, including a Sesame Workshop-produced video aimed at preschool children, an American Red Cross initiative that focuses on children in kindergarten through middle school, and a video directed at high school students as part of a student-generated initiative at a Seattle school. The authors use a matrix developed by Anderson and Woodrow (1989) to assess the extent to which these
initiatives emphasize youth-based vulnerabilities and capacities with respect to physical/material, social/organizational, and motivational/attitudinal factors. The field report ends with a call for more systematic research to explore the effectiveness of disaster education initiatives that seek to educate youth.


The aim of art therapy is to facilitate positive change through engagement with the therapist and the art materials in a safe environment. This article will explore how art therapy is used to help children with emotional, developmental and behavioural problems. It will show how change occurs during the process of physical involvement with the materials; through the making of a significant art object; through sublimation of feelings into the images; and through communication with the therapist via the art object. The article is illustrated with case vignettes which demonstrate how the theories underpinning art therapy are put into practice, drawing attention to the changes that occur as a result.


This study investigates the impact of two local calamities: an explosion at a firework factory in the city of Enschede on 13 May and a fire at a discotheque on 1 January 2001 during a New Years Eve party in the town of Volendam. On the educational achievement of children at the end of their primary education. Based on a quasi-experimental design with both control groups and pre-tests, we found that in the three years following the two tragedies, the test scores of girls in those areas closest to the events were on average 0.2 standard deviations lower. This corresponds to a downward shift in the distribution of girls' test scores. Boys' test scores, meanwhile, were not significantly affected by the disasters, and nor were the scores of pupils from nearby areas. In the three years following the calamities, girls' test scores in one of the areas (Volendam) have slowly recovered, although they remain well below their pre-event level.


Disasters have increased in incidence worldwide and children are especially vulnerable to their effects. Childhood is a unique period during which physical, mental and social development and growth take place. Psychological damage at this stage can affect children for years to come. To outline the psychological and physiological impacts of disaster on children and shed light on possible interventions, the authors reviewed the empirical literature utilizing search databases such as PsychInfo as well as policy documents and guidelines from major organizations (e.g., the United Nations). This article discusses potential biological mechanisms between stress, physiological dysregulation and subsequent illness in children. In addition, it discusses risk and protective factors and their possible role in buffering children against mental, physiological and health consequences of disasters, and outlines international and cross-cultural perspectives, as well as implications for further research.


Describes low cost, sustainable, community based projects designed with cultural relevance in Angola to support children living in post conflict societies.


Abstract Children and adolescents in the U.S. and worldwide are commonly exposed to traumatic events, yet practitioners treating these young people to reduce
subsequent psychological harm may not be aware of—or use—interventions based on the best available evidence. This systematic review evaluated interventions commonly used to reduce psychological harm among children and adolescents exposed to traumatic events. Guide to Community Preventive Services (Community Guide) criteria were used to assess study design and execution. Meta-analyses were conducted, stratifying by traumatic exposures. Evaluated interventions were conducted in high-income economies, published up to March 2007. Subjects in studies were <=21 years of age, exposed to individual/mass, intentional/unintentional, or manmade/natural traumatic events. The seven evaluated interventions were individual cognitive-behavioral therapy, group cognitive behavioral therapy, play therapy, art therapy, psychodynamic therapy, and pharmacologic therapy for symptomatic children and adolescents, and psychological debriefing, regardless of symptoms. The main outcome measures were indices of depressive disorders, anxiety and posttraumatic stress disorder, internalizing and externalizing disorders, and suicidal behavior. Strong evidence (according to Community Guide rules) showed that individual and group cognitive-behavioral therapy can decrease psychological harm among symptomatic children and adolescents exposed to trauma. Evidence was insufficient to determine the effectiveness of play therapy, art therapy, pharmacologic therapy, psychodynamic therapy, or psychological debriefing in reducing psychological harm. Personnel treating children and adolescents exposed to traumatic events should use interventions for which evidence of effectiveness is available, such as individual and group cognitive-behavioral therapy. Interventions should be adapted for use in diverse populations and settings. Research should be pursued on the effectiveness of interventions for which evidence is currently insufficient.


Children and families are now in the front line of war, conflict and terrorism as a consequence of the paradigm shift in the nature of warfare and the growth of terror as a weapon. They are just as vulnerable as are adults to the traumatizing effects of violence and mass violence. Furthermore, employing children as soldiers is not new, but it is continuing and young people are also perpetrators of other forms of violence. This paper summarizes a selection of the literature showing the direct and indirect psychosocial impacts on minors of their exposure to single incident (event) and recurrent or repetitive (process) violence. Additionally, children's psychosocial and physical development may be affected by their engagement with violence as victims or perpetrators. Several studies point to positive learning from certain experiences in particular communities while many others show the potential for lasting negative effects that may result in children being more vulnerable as adults. The spectrum of response is very wide. This paper focuses on resilience but also provides access to several frameworks for planning, delivering and assuring the quality of community and family-orientated and culture-sensitive responses to people's psychosocial needs in the aftermath of disasters of all kinds including those in which children and young people have been involved in mass violence.


Deals with a study which examined events in the flooding of the Nyngan river in Australia in 1990 related to models of disaster management and decision-making. Information on the Nyngan chronology; Actors and interests; Analysis and comment; Details on crisis management theory and decision modelling; Conclusion.


Although there is increasing awareness of the need for disaster preparedness within elementary and high schools, daycare centers and preschools have largely been overlooked in preparation and recovery plans. The purpose of this project was to identify the presence and use of formal disaster plans for childcare agencies, assess the projected emotional response of childcare personnel to children following a
disaster, evaluate the amount of in-service training received in the area of disaster preparedness and emotional recovery, and elicit recommendations from childcare personnel regarding ways to increase awareness of children’s emotional needs following a disaster. Sixty-seven surveys were received from center-based childcare personnel in 14 Florida counties. Responses indicated a need and desire for greater support around disaster preparedness as well as increased availability for training regarding the emotional needs of children following disasters.


Background: Child survivors of a catastrophic earthquake in Turkey were evaluated three and a half years after the event, and three years after a sub-group participated in a teacher-mediated intervention developed by the authors. The goal of this follow-up study was to determine the long-term effectiveness of the original intervention.

Methods: Subjects who participated in the intervention were compared with a control group of children similar in terms of demographics, risk and exposure. All children were evaluated in terms of posttraumatic, grief and dissociative symptomatology, as well as adaptive functioning (academic performance, social behavior and general conduct).

Results: The severity of post-traumatic, grief and dissociative symptoms of the two groups was comparable. Teachers blind to group assignment rated participating children significantly higher than the control group in terms of adaptive functioning.

Conclusions: Early post-disaster intervention addressing children and their educational milieu provides children with significant symptomatic reduction, allowing the mobilization of adaptive coping, thereby enhancing their overall functioning as observed in school.


This manual provides practical guidelines for the management of patients with severe malnutrition. It seeks to promote the best available therapy so as to reduce the risk of death, shorten the length of time spent in hospital, and facilitate rehabilitation and full recovery. Emphasis is given here to the management of severely malnourished children; the management of severely malnourished adults and adolescents is also considered briefly. Severe malnutrition is both a medical and a social disorder. That is, the medical problems of the child result, in part, from the social problems of the home in which the child lives. Malnutrition is the end result of chronic nutritional and, frequently, emotional deprivation by carers who, because of poor understanding, poverty or family problems, are unable to provide the child with the nutrition and care he or she requires. Successful management of the severely malnourished child requires that both medical and social problems be recognized and corrected. If the illness is viewed as being only a medical disorder, the child is likely to relapse when he or she returns home, and other children in the family will remain at risk of developing the same problem. (*Extract from Introduction - RD)


Describes the factors influencing of young children's development and mental health and the effects of severe food shortage on children and their parents/carers health and relationships. Guidelines for development of parent/carer education programmes relating to psychosocial stimulation as well as nutrition in feeding centres and in homes. (RD)


Many disasters that occur throughout the world remain largely under-reported, frequently because they began a number of years ago, and have become "chronic" or "long term." Yet, in their vulnerability, the affected populations are no less deserving of humanitarian aid than those involved in the more acute, sudden disasters that make a major impact in the media. Aid providers need to direct their efforts at
enabling populations to build their capacity and decrease their vulnerability, thus enhancing their preparedness for any future disaster. This article considers the importance of paying careful regard to the vulnerability, capacities, and disaster preparedness of people affected by these long-term disasters. Vulnerability, capacity, and disaster preparedness are examined specifically in the context of food shortages and malnutrition, with particular reference to the long-term disaster in the African country of Kenya.


This paper illustrates how human ecological theory and hope theory were used to develop arts-based research tools and program interventions with refugee children in a Canadian inner city context. Building on key ideas such as: the contextualized, reciprocal, and dynamic nature of hope, the paper identifies a series of program activities. These include the use of photographs, a hope quilt, the development of narratives, followed by opportunities for children to share their hope work with others and for parents and other adults to undertake child-focused and hope-based discussions. Policy and program implications for refugee children are then discussed.


This article examines the recent revision of the Sphere Minimum Standards in disaster response relating to food security, nutrition and food aid. It describes how the revision attempted to incorporate the principles of the Humanitarian Charter, as well as relevant human rights principles and values into the Sphere Minimum Standards. The initial aim of the revision was to ensure that the Sphere Minimum Standards better reflected the principles embodied in the Humanitarian Charter. This was later broadened to ensure that key legal standards and principles from human rights and humanitarian law were considered and also incorporated, in part to fill the "protection gap" within the existing standards. In relation to the food security, nutrition and food aid standards, it was agreed by participants in the process that the human right to adequate food and freedom from hunger should be incorporated. In relation to more general principles underlying the Humanitarian Charter, itself drawn largely from human rights and humanitarian law, it was agreed that there was a need to strengthen "protection" elements within the standards and a need to incorporate the basic principles of the right to life with dignity, non-discrimination, impartiality and participation, as well as to explore the relevance of the concept of the progressive realisation of the right to food. The questions raised in linking rights to operational standards required thought, on the one hand, about whether the technical standards reflected a deep understanding of the values expressed within the legal instruments, and whether the existing standards were adequate in relation to those legal rights. On the other hand, it also required reflection on how operational standards like Sphere could give concrete content to human rights, such as the right to food and the right to be free from hunger. However, there remain challenges in examining what a rights-based approach will mean in terms of the role of humanitarian agencies as duty-bearers of rights, given that the primary responsibility rests with state governments. It will also require reflection on the modes and mechanisms of accountability that are brought to bear in ensuring the implementation of the Minimum Standards.


This study uses geographic and network analysis, and regression techniques, to examine access to services for vulnerable populations in disaster, and offer potential interventions to improve access. The population for this study is 67 organizations providing disaster social services in a U.S. metropolitan area, and an additional 25 organizations which are willing to provide these services but do not have a formal disaster relief function. The findings from this study indicate a lack of relief services for vulnerable populations, including African-Americans, people over 75 years old, and female-headed households with young children. During a disaster, a type of
social injustice results from (a) the vulnerability of these populations to disaster, (b) the higher vulnerability to disaster of the areas in which these populations reside, (c) the smaller number of organizations serving these areas. If connectedness of smaller, informal organizations to the disaster network were improved, otherwise isolated organizations could be a source of substantial resources for the metropolitan area. Suggestions are offered for interventions, based on services coordination and community organization models, for correcting the lack of access to services documented by this study.


The impact of the death of a parent has long been emphasized in the literature concerning childhood bereavement, yet little has been written about preventive intervention strategies that may facilitate positive adaptation to parental loss. One strategy that appears to have promise is creative arts therapy groups for children offered in conjunction with companion parent groups. The goal of creative arts in short-term bereavement counseling is to provide social sanction for juvenile grief through the use of activities that extend a child's understanding and expressive skills regarding parental loss. The companion parent group provides didactic and open-ended discussion focused on the members' spousal loss as well as their adjustment to the role of widowed parent. Such a bereavement intervention program has been in existence at Hospice, Inc. since 1984. A registered art therapist conducts the creative arts groups for children and a social worker facilitates the companion groups. Both parental evaluations and clinical observations suggest that a creative arts approach may effect a productive mourning experience for children. However, the power of this approach appears diluted when a child does not have a parent in the companion group. This implies that the child in grief must be considered within the context of the family system and that the value of the therapy is redoubled when offered as part of an interdisciplinary intervention.


Provides a guide in creating literature safety zones for children. Effect of the events of September 11, 2001, on the sense of safety for children and their families in the United States; Description of literature safety zones; Importance of communicating to children that they are safe; Aspects of child development which determines the perception of trauma resulting from all kinds of stress and disaster; Resources to consider when using literature to affirm to children that they are valued, loved and safe.


Case study of intervention carried out by The Arab Resource Collective (ARC) after the 2006 conflict in Southern Lebanon, to train teachers in four schools to intervene effectively with children (3-8 years of age) traumatised by their experiences and their parents. Provides some evaluation of the project, generally judged to be effective and timely in its delivery. (RD)


To systematically evaluate Camp Noah, a faith-based intervention for children affected by natural disaster: to assess the extent to which the camps were carried out according to the program design, to describe how the Camp Noah program was implemented, and to explore Camp Noah program effects on children. Design: Qualitative survey. Sample: Twenty-eight local, state, and national stakeholders. Measurement: Open-ended interviews. Results: Although camps adhered to the curriculum, many implementation weaknesses resulted from a lack of clear program structure and written procedures. Stakeholders observed that children generally were able to process their disaster experiences in the camp, and some children exhibited increased understanding of God's role in their disaster experience. Stakeholders also described parent reports of increased coping skills related to weather among some
children. Lastly, stakeholders both observed positive effects of Camp Noah on children's behaviors and symptoms and described changes reported to them by parents. Conclusions: Every year, thousands of children suffer emotionally as a result of natural disaster in the United States. With public health nursing support and improvements in infrastructure, Camp Noah may be a promising intervention to address this important public health problem.
Thematic Groupings

The bibliographic references above have been sorted into the following thematic groupings and sub-groupings. Please refer to the full alphabetical bibliography for full citation and abstracts for the articles listed within each category.

1. **Need**: articles that identify the needs of children in emergency and disaster situations, including global statistics.

2. **Interventions**: articles that describe interventions and outcomes:
   - art therapy
   - child friendly spaces
   - classroom based interventions
   - health
   - play based/therapy interventions
   - intervention policy
   - post traumatic stress symptoms and interventions
   - psychosocial symptoms and interventions

3. **Human conflict**
   - armed conflict & social unrest
   - terrorism

4. **Disasters**
   - earthquake
   - fire
   - flood
   - industrial/man made
   - nutrition
   - hurricane, cyclone, tornado
   - tsunami

5. **Curricula, resources, training and dissemination of information**: articles that describe programs and issues relating to training of caregivers or others in emergency/disaster situations and to issues relating to the dissemination of information about the needs of young children.

6. **Research**: articles that discuss research issues associated with young children and emergency/disaster situations

7. **Review articles**: articles that provide overviews of the current literature or state of knowledge about various topics.

8. **Special Groups**: articles that address the needs of specific populations:
   - Prenatal Exposure to Disasters
   - Prenatal needs
   - 0-3 years age group
   - 4-8 years age group Parents & Carers
   - Women
   - Older People

9. **Australian research**: articles that emanate from Australian research projects and/or by Australian authors.
1. Need

(Connolly, Hayden et al. 2007)
(Machel 1996)
(Office of the Special Representative of the Secretary-General for Children and Armed Conflict and United Nations Children’s Fund 2009)
(Save the Children 2008)
(United Nations Children's Fund (UNICEF) 2010)
(United Nations Children's Fund (UNICEF) 2009)

2. Interventions

Art Therapy Interventions

(Ahmed and Siddiqi 2006)
(Finn 2003)
(Heenan 2006)
(Hosea 2006)
(Lacroix, Rousseau et al. 2007)
(Orr 2007)
(Smilan 2009)
(Waller 2006)
(Wethington, Hahn et al. 2008)
(Yohani 2008)
(Zambelli, Clark et al. 1988)

Child friendly spaces

(Abdelmoneium 2005)
(Aguilar and Retamal 2009)
(Cuninghame, Hyder et al. 2001)*
(de Winter 2007)
(Graham and Haines 2008)
(Kamel 2006)
(Kostelny 2008)*
(Kostelny 2008)*
(Kostelny and Wessells 2005)
(Madfis, Martyris et al. 2010)*
(peek, Sutton et al. 2008)*
(Ruskin 2009)
(Save the Children 2008)
(Torjesen 2007)
(Zeece and Stolzer 2002)

Classroom based interventions

(Aghayan, Schellhaas et al. 2005)
(Back, Cameron et al. 2009)*
(Baggerly and Rank 2005)
(Bender and Sims 2007)
(Bilmes and Heroman 2006)*
(Cohen, Jaycox et al. 2009)
(Cook-Cotitone 2004)
(Dean, Langley et al. 2008)
(Dolch, Meyer et al. 2008)*
(Evans 1996)*
(Evans and Oehler-Stinnett 2006)
(Frost 2005)
(Galindo, Sanmarti et al. 2006)
(Gangi and Barowsky 2009)
(Gay 2007)
(Gelkopf, Ryan et al. 2008)
(Heath, Nickerson et al. 2009)
(Hebert and Ballard 2007)
(Heroman and Bilmes 2005)*
(Ismail 2007)*
(Jimerson, Brock et al. 2005)
(Kinsel and Thomasgard 2008)
(Knox and Roberts 2005)
(Lee, Parker et al. 2008)
(Lintner 2006)
(Morris and Edwards 2008)*
(Nicholai and Triplehorn 2003)*
(Nickerson and Zhe 2004)
(Penman 2006)
(Prinstein and La Greca 1996)
(Pullins, McCammon et al. 2005)
(Robertson and King 2007)
(Save the Children 2008)
(Shen and Sink 2002)
(Smilan 2009)
(The Child and Adolescent Trauma Treatments and Services Consortium (CATS) 2007)
(Tualeka, Erisandy et al. 2007)*
(Wachtendorf, Broen et al. 2008)*
(Wolmer, Laor et al. 2005)
(Zeece and Stolzer 2002)
(Zein 2007)*
(Zotti, Graham et al. 2006)

Health
(Moss, Ramakrishnan et al. 2006)
(Dolch, Meyer et al. 2008)*

Play Based/Therapy Interventions
(Baggerly and Exum 2008)
(Dugan, Snow et al. 2010)
(Rousseau, Benoit et al. 2009)
(Sadeh, Hen-Gal et al. 2008)*
(Shen 2002)
(Shen and Sink 2002)

Intervention Policy
(Abrahams 2001)
(Aguillera and Planchon 1995)
(Day and Dwyer 2003)
(Department of Health NSW 2009)
(Gostelow 2000)
(International Institute for Educational Planning (IIEP) 2006)*
(Jacobs and Williams 2009)
(McConnell and Drennan 2006)
(Morris, van Ommeren et al. 2007)
(Morris and Edwards 2008)*
(Munir, Ergene et al. 2004)
(Prahbu 2007)*
(Pupavac 2001)
(Seal, Taylor et al. 2001)
(Smith, Tremethick et al. 2005)
(van Ommeren and Wessells 2007)
(Young, Taylor et al. 2004)
Post Traumatic Stress Symptoms & Interventions

(Birmes, Raynaud et al. 2009)
(Bokszczanin 2007)
(Bremner, Vermetten et al. 2000)
(Catani, Kohladevy et al. 2009)
(Chemtob, Nakashima et al. 2002)
(Cohen, Jaycox et al. 2009)
(Cohen and Mannarino 2008)
(Cook-Cottone 2004)
(Cryder, Kilmer et al. 2006)
(Davis and Siegel 2000)
(Deering 2000)
(Ekși, Braun et al. 2007)
(Eksi, Peykerli et al. 2008)
(Evans and Oehler-Stinnett 2006)
(Hamblen, Gibson et al. 2006)
(Hobeish 2007)*
(Hobfoll, Watson et al. 2007)
(Hoge, Austin et al. 2007)
(Hoteit 2007)*
(Hoven, Duarte et al. 2004)
(Howe 1997)
(Jones 2008)
(Joshi and Lewin 2004)
(Kenardy, Webster et al. 1996)
(Klein, Devoe et al. 2009)
(Koplewicz, Vogel et al. 2002)
(Kreuger and Stretch 2003)
(La Greca and Silverman 2009)
(Lengua, Long et al. 2006)
(Lengua, Long et al. 2005)
(Levine 2004)
(Lonigan and Anthony 1998)
(Luthra, Abramovitz et al. 2009)
(Madrid and Grant 2008)
(McDermott, Lee et al. 2005)
(McDermott and Palmer 1999)
(McFarlane 1989)
(Miller 1999)
(Munir, Ergene et al. 2004)
(Neuner, Schauer et al. 2006)
(Osofsky, Osofsky et al. 2009)
(Rosen, Matthieu et al. 2009)
(Ruzek, Brymer et al. 2007)
(Sadah, Hen-Gal et al. 2008)*
(Salloum and Overstreet 2008)
(Shaw, Applegate et al. 1996)
(Shelby and Tredinnick 1995)
(Smith, Tremethick et al. 2005)
(Terranova, Boxer et al. 2009)
(The Child and Adolescent Trauma Treatments and Services Consortium (CATS) 2007)
(Tolin and Foa 2006)
(Trickey and Black 2000)
(Tural, Coşkun et al. 2004)
(Vijayakumar, Kannan et al. 2006)
(Zotti, Graham et al. 2006)


3. Human Conflict

Armed Conflict & Social Unrest

(Abdelmoneium 2005)
(Bernard van Leer Foundation 2005)*
(Boyden 2007)
(Boyden, de Berry et al. 2002)
(Brown, Sidzumo-Sanders et al. 1996)
(Catani, Kohladevy et al. 2009)
(Connolly, Hayden and Levin, 2007)
(Corbin 2008)
(Cunninghame, Hyder et al. 2001)*
(de Winter, 2007)
(Evans 1996)*
(Fozzard 1995)*
(Gangi and Barowsky 2009)
(Hadi and Llibre 1998)
(Hobeish 2007)*
(Hoteit 2007)*
(Igreja 2003)*
(Igreja 2004)*
(International Institute for Educational Planning (IIEP) 2006)*
(Jones and Edgerton 2009)*
(Jones, Frairy, Cunningham, Weddle and Kaiser, 2008)
(Kostelny 2008)*
(Landers 1998)*
(Lloyd, Penn et al. 2005)*
(Machel 1996)
(Massad, Nieto et al. 2009)*
(Morris, van Ommereren, Belfer, Saxena and Saraceno, 2007)
(Moss, Ramakrishnan et al. 2006)
(Mueller 2006)
(Macksoud 2006)*
(no author 2007)*
(Office of the Special Representative of the Secretary-General for Children and Armed Conflict and United Nations Children’s Fund 2009)
(Ramzan and Fox 2008)
(Richter 2004)*
(Ruskin, 2009)
(Sadeh, Hen-Gal et al. 2008)*
(Save the Children, 2008)
(Save the Children no date)*
(Shaarani 2007)*
(Skonhoft 2000)
(Thabet, Vostanis et al. 2005)*
(United Nations Children's Fund (UNICEF) 2010)
(United Nations Population Fund (UNFPA) 2001)*
(Wessells and Monteiro 2008)*
(Williams 2007)

**Terrorism**

(Aber and Gershoff 2004)
(Baggerly and Rank 2005)
(Chen, Chung et al. 2003)
(DeVoe, Bannon et al. 2006)
(Fairbrother, Stuber et al. 2004)
(Hagan 2005)
(Henry, Tolan et al. 2004)
(Hoven, Duarte et al. 2004)
(Joshi and Lewin 2004)
(Kinsel and Thomasgard 2008)
(Klein, Devoe et al. 2009)
(Koplewicz, Vogel et al. 2002)
(Landrigan, Forman et al. 2008)
(Lee, Isaac et al. 2002)
(Lengua, Long et al. 2006)
(Lengua, Long et al. 2005)
(Neria, Gross et al. 2006)
(Pfefferbaum, Nixon et al. 1999)
(Pfefferbaum, North et al. 2006)
(Saylor, Cowart et al. 2003)
(Stuber, Galea et al. 2005)
(The Child and Adolescent Trauma Treatments and Services Consortium (CATS) 2007)

4. **Disasters**

**Earthquake**

(Azarian, Miller et al. 1996)
(Doostgharin 2009)
(Eksi, Braun et al. 2007)
(Eksi, Peykerli et al. 2008)
(Karanci, Aksit et al. 2005)
(Kiliç, Ozguven et al. 2003)
(Laor, Wolmer et al. 2002)
(Lewin, Carr et al. 1998)
(Magkos, Arvaniti et al. 2004)
(Mitchell, Haynes et al. 2008)
(Munir, Ergene et al. 2004)
(Pérez-Sales, Cervellón et al. 2005)
(Proctor, Fauchier et al. 2007)
(Sahin, Batigun et al. 2007)
(Shen 2002)
(Ticehurst, Webster et al. 1996)
(Tural, Coşkun et al. 2004)
(Wolmer, Laor et al. 2005)
Fire
(Camilleri, Healy et al. 2007)
(Evans and Oehler-Stinnett 2006)
(Linke 2003)
(Macdonald 2009)
(McDermott and Finlayson 1995)
(McDermott, Lee et al. 2005)
(McDermott and Palmer 1999)
(McFarlane 1989)

Flood
(Aduriz, Bluthgen et al. 2009)
(Bokszczanin 2007)
(Cryder, Kilmer et al. 2006)
(Kreuger and Stretch 2003)
(Osofsky, Osofsky et al. 2009)
(Pradhan, West et al. 2007)
(Pullins, McCammon et al. 2005)
(Rashid 2000)

Industrial/Man made
(Boer, Smit et al. 2009)
(Committee on Environmental Health 2003)
(Dirkszwaiger, Kerssens et al. 2006)
(Havenaar, Rumyantzeva et al. 1997)
(Johnes 2000)
(Korol, Green et al. 1999)
(Smilde-van den Doel, Smit et al. 2006)
(Vila, Witkowski et al. 2001)
(Webbink 2008)

Nutrition
(Eriksson 2007)
(Gostelow 2000)
(Gross and Webb 2006)
(Infant and Young Child Feeding in Emergencies (IFE) Core Group 2007)*
(Longhurst 1995)*
(Magkos, Arvaniti et al. 2004)
(Moss, Ramakrishnan et al. 2006)
(Seal, Taylor et al. 2001)
(Wright and Vesala-Husemann 2006)
(World Health Organisation (WHO) 1999)*
(World Health Organisation (WHO) 2006)*
(Young, Taylor et al. 2004)

Hurricane, cyclone, tornado
(Bahrick, Parker et al. 1998)
(Bilmes and Heroman 2006)*
(Buekens, Xiong et al. 2006)
(Childs, Hodgson et al. 2004)
(Cohen, Jaycox et al. 2009)
(Cryder, Kilmer et al. 2006)
(Dugan, Snow et al. 2010)
(Ensor 2008)*
(Evans and Oehler-Stinnett 2006)
(Fivush, McDermott Sales et al. 2004)
(Gay 2007)
(Hebert and Ballard 2007)
(Heroman and Bilmes 2005)*
(Jones, Frary et al. 2001)
(Kinney, Miller et al. 2008)
(La Greca, Silverman et al. 1998)
(Laplante, Zelazo et al. 2007)
(Lee, Parker et al. 2008)
(Lintner 2006)
(Lonigan and Anthony 1998)
(Madrid and Grant 2008)
(Mitchell, Haynes et al. 2008)*
(Osofsky, Osofsky et al. 2009)
(Pfefferbaum, Houston et al. 2008)
(Pullins, McCammon et al. 2005)
(Robertson and King 2007)
(Salloum and Overstreet 2008)
(Shaw, Applegate et al. 1996)
(Shelby and Tredinnick 1995)
(Swenson, Saylor et al. 1996)
(Terranova, Boxer et al. 2009)
(Thomalla and Schmuck 2004)
(Wilson and Kershaw 2008)*

**Tsunami**

(Bada Math, Girimaji et al. 2006)
(Bartlett 2008)*
(Becker 2006)
(Bhushan and Kumar 2007)
(Catani, Jacob et al. 2008)
(Gelkopf, Ryan et al. 2008)
(Htay 2006)
(Kostelny and Wessells 2005)
(Lintner 2006)
(Meynard, Nau et al. 2008)
(Neuner, Schauer et al. 2006)
(Nikapota 2006)
(Nishikiori, Abe et al. 2006)
(Penrose and Takaki 2006)
(Vijayakumar, Kannan et al. 2006)
(Vijayakumar, Kannan et al. 2006)

5. **Curricula and resources, training and dissemination of information**

(Action for the Rights of Children (ARC) 2001)*
(Aguilar and Retamal 2009)
(Aguilera and Planchon 1995)
(Ahmed and Siddiqi 2006)
(Back, Cameron et al. 2009)*
(Bada Math, Girimaji et al. 2006)
(Baggerly and Exum 2008)
(Bartlett and Illus 2006)*
(Bilmes and Heroman 2006)*
(Carr 2004)
(Connolly, Hayden et al. 2007)
(Cuninghame, Hyder et al. 2001)*
(Day and Dwyer 2003)
(Dean, Langley et al. 2008)
(Department of Health NSW 2009)
(Emergency Management Australia 2003)
6. Research: Methods and Issues
(Knack, Chen et al. 2006)
(Levine 2004)
(Pfefferbaum and North 2008)

7. Review Articles
(Boyden 2007)
(Boyden, de Berry et al. 2002)
(Davis and Siegel 2000)
(Hobfoll, Watson et al. 2007)
(Hoge, Austin et al. 2007)
(La Greca and Silverman 2009)
(Mercuri and Angelique 2004)
(Morris, van Ommeren et al. 2007)
(Moss, Ramakrishnan et al. 2006)
(Ronan, Crellin et al. 2008)*
(Scheeringa and Zeanah 2001)
(Tolin and Foa 2006)
(Weissbecker, Sephton et al. 2008)*
(Wethington, Hahn et al. 2008)

8. Special Groups

Prenatal Exposure to Disasters
(Buekens, Xiong et al. 2006)
(Kinney, Miller et al. 2008)
(Landrigan, Forman et al. 2008)
(Laplante, Zelazo et al. 2007)

Prenatal Needs
(United Nations Population Fund (UNFPA) 2001)*

0-3 years age group
(Azarian, Miller et al. 1996)
(Bahrick, Parker et al. 1998)
(Bernard van Leer Foundation 2005)*
(Bernard van Leer Foundation 2009)*
(Bilmes and Heroman 2006)*
(Deering 2000)
(DeVoe, Bannon et al. 2006)
(Fivush, McDermott Sales et al. 2004)
(Gill, Gulsvig et al. 2008)*
(Grotberg 2001)
(Igreja 2003)
(Igreja 2004)
(Infant and Young Child Feeding in Emergencies (IFE) Core Group 2007)*
(Kamel 2006)
(Klein, Devoe et al. 2009)
(Kostelny 2008)* (N. Uganda)
(Landers 1998)*
(Laplante, Zelazo et al. 2007)
(Linke 2003)
(Lloyd, Penn et al. 2005)*
(Mackssoud 2006)*
(Nishikiori, Abe et al. 2006)
(Massad, Nieto et al. 2009)*
(Pradhan, West et al. 2007)
(Sadeh, Hen-Gal et al. 2008)*
(Scheeringa and Zeana 2001)
(Seal, Taylor et al. 2001)
(Smilde-van den Doel, Smit et al. 2006)
(Swenson, Saylor et al. 1996)
(Tualeka, Erisandy et al. 2007)*
(United Nations Population Fund (UNFPA) 2001)*

4-8 years age group
(AiZhong, Hongzhuan et al. 2007)
(Bernard van Leer Foundation 2005)*
(Bernard van Leer Foundation 2009)*
(Boer, Smit et al. 2009)
(Catani, Jacob et al. 2008)
(Cuninghame, Hyder et al. 2001)*
(Dirkzwager, Kerssens et al. 2006)
(Dybdaahl 2001)*
(Evans 1996)*
(Fairbrother, Stuber et al. 2004)
(Fivush, McDermott Sales et al. 2004)
(Gill, Gulsvig et al. 2008)*
(Gilmore and Campbell 2007)
(Grotberg 2001)
(Heroman and Bilmes 2005)*
(Kamel 2006)
(Klein, Devoe et al. 2009)
(Kostelny 2008)* (N. Uganda)
(Kostelny and Wessells 2005)
(Landers 1998)*
(Lee, Parker et al. 2008)
(Lloyd, Penn et al. 2005)*
(Macdonald 2009)
(Massad, Nieto et al. 2009)*
(Nishikiori, Abe et al. 2006)
(no author 2007)
(Pradhan, West et al. 2007)
(Proctor, Fauchier et al. 2007)
(Sadeh, Hen-Gal et al. 2008)*
(Sahin, Batigun et al. 2007)
(Salloum and Overstreet 2008)
(Saylor, Cowart et al. 2003)
(Shaw, Applegate et al. 1996)
(Shelby and Tredinnick 1995)
(Smith, Tremethick et al. 2005)
(Swenson, Saylor et al. 1996)
(Tualeka, Erisandy et al. 2007)*
(Macksooud 2006)*
(Wachtendorf, Broen et al. 2008)*
(Zakour and Harrell 2003)
(Sein 2007)*

**Parents & Carers**
(Aber and Gershoff 2004)
(Baggerly and Exum 2008)
(Bilmes and Heroman 2006)*
(Birmes, Raynaud et al. 2009)
(Bokszczanin 2008)
(Buekens, Xiong et al. 2006)
(Catani, Jacob et al. 2008)
(Cohen and Mannarino 2008)
(DeVoe, Bannon et al. 2006)
(Dybdahl 2001)*
(Henry, Tolan et al. 2004)
(Heroman and Bilmes 2005)*
(Joshi and Lewin 2004)
(Kilic, Ozguven et al. 2003)
(Kinsel and Thomasgard 2008)
(Kubicek, Ramirez et al. 2008)
(Lengua, Long et al. 2006)
(Mack, Spotts et al. 2006)
(Peek, Sutton et al. 2008)*
(Prinstein and La Greca 1996)
(Proctor, Fauchier et al. 2007)
(Richter 2004)*
(Sagi-Schwartz 2003)
(Scaramella, Sohr-Preston et al. 2008)
(Scheeringa and Zeanah 2001)
(Shaarani 2007)*
(Shaw 2000)
(Skonhoft 2000)
(Stuber, Galea et al. 2005)
(Vijayakumar, Kannan et al. 2006)
(Wilson and Kershaw 2008)*

**Women**
(Buekens, Xiong et al. 2006)
(Havenaar, Rumyantzeva et al. 1997)
(Landrigan, Forman et al. 2008)
(Najarian, Goenjian et al. 2001)
(Nishikiori, Abe et al. 2006)
(Rashid 2000)
(The World Bank 2010)
(Tolin and Foa 2006)
(United Nations Population Fund (UNFPA) 2001)*
(Zakour and Harrell 2003)
Older People
(Chen, Chung et al. 2003)
(Magkos, Arvaniti et al. 2004)
(Man Cheung, Werrett et al. 2004)
(Nishikiori, Abe et al. 2006)
(Ticehurst, Webster et al. 1996)
(Zakour and Harrell 2003)

9. Australian Research
(Abrahams 2001)
(Camilleri, Healy et al. 2007)
(Connolly, Hayden et al., 2007)
(Day and Dwyer 2003)
(Ellemor 2005)
(Emergency Management Australia 2003)
(Gilmore and Campbell 2007)
(Hobfoll, Watson et al. 2007)
(Jacobs and Williams 2009)
(Kenardy, Webster et al. 1996)
(Lee, Isaac et al. 2002)
(Lewin, Carr et al. 1998)
(Linke 2003)
(Macdonald 2009)
(McConnell and Drennan 2006)
(McDermott and Finlayson 1995)
(McDermott, Lee et al. 2005)
(McDermott and Palmer 1999)
(McFarlane 1989)
(Mitchell, Haynes et al. 2008)*
(Morrissey and Reser 2007)
(Ramzan and Fox 2008)
(Stevens, Agho et al. 2009)
(Ticehurst, Webster et al. 1996)
(Wills 1996)

* These articles did not turn up in the scoping exercise but were submitted or recommended by reviewers.