# Populations 5 with special needs

#### **OVERVIEW OF CHAPTER**

Description: Identifies special populations at risk after a disaster

and their specific assistance needs

Purpose: To describe the interventions needed to assist special

populations.

Content: • Characteristics of different populations and their

needs, including:

- Children

- Elderly populations

- Persons with mental illness

- Persons with HIV/AIDS

- Persons with substance abuse problems

- Post-disaster caregivers and workers

• Identification and description of "burnout."

Learning Objectives:

 To identify and describe the characteristic reactions of special populations affected by a disaster.

To describe the operations needed to assist

populations at risk.

#### CHILDREN

A disaster produces a variety of reactions in children that are specific for each child and depend on a group of variables. The type, extent, and proximity of the impact on a child within a family living in a geographical area has to be understood both from a child psychology and a disaster response perspective.

The following concepts are useful in understanding a child's reactions to a disaster:

- Stage of development;
- Gender, ethnicity, and economic status;
- Usual coping style;
- Intensity of the impact;
- Availability and appropriate "fit" between child's needs and support systems;
- Extent of dislocation;
- Availability of relief and community post-disaster assistance.

Based on these concepts, the post-disaster mental health intervention program can be organized along two major lines of activity. The first is direct face-to-face intervention through outreach or through contact with families housed in emergency shelters during the acute stage of the emergency. The second line of activity begins as the families relocate to temporary or permanent housing, which may mean a complete change of neighborhood or human support networks. This is accompanied by changing phases of crisis resolution that will necessitate different therapeutic procedures.

The objective of post-disaster mental health intervention is to restore the child to his/her developmental level of functioning by helping the child handle the stressful situation. The worker also assists family members in reorganizing their world so they can extend adequate parenting support to the child.

Collaboration with child welfare agencies can offer broad-based opportunities to help children that have been traumatized by a disaster. School personnel are important collaborators to help children resolve the post-disaster crisis.

## M PSYCHIC TRAUMA PRODUCED BY A CATASTROPHIC EVENT

The following key issues are critical in helping a child deal with a disaster:

- Children's reactions will vary according to their stage of cognitive, affective, and sociobehavioral development.
- The reactive phenomena observed after a catastrophic event represent of bio-psychosocial systems reactions and early efforts to cope with the disorganization of these systems.

- Family and societal behavior toward a child are powerful influences that can enhance
  or impede the trauma resolution process. The child's reliance on the family for
  cognitive guidance and socioemotional support is influenced by the child's stage
  of psychosexual development and preexistent psychopathology.
- A mourning process accompanies all catastrophic psychic trauma due to loss of body configuration, interpersonal bonds, worldview and familiarity, expectations and trust.
- Reactive depression as a clinical syndrome needs to be differentiated from the expression of psychic trauma and an effective/ineffective mourning outcome.

Current intervention practices for children include the following three elements:

1. An opportunity for exposure to a disaster's frightening elements in a nonthreatening atmosphere.

#### Example:

Activities such as drawing pictures, sharing stories, and playing disaster games let children "relive" and deal with the disaster.

2. Development of coping skills for issues that remains difficult.

#### Example:

Adjustment to new surroundings helps children cope with the loss of their house.

3. Access to supportive social relationships.

#### Example:

Parenting support helps children adjust when a disaster has affected a parent's ability to cope.

#### Key Variables Influencing Post-disaster Reactions among Children

- Speed of onset
- · Duration of the trauma
- Potential for recurrence
- Degree of life threat
- Degree of exposure to death, dying, and destruction
- Proportion of the family affected
- Role of caregiver in the trauma
- Degree of displacement in home continuity

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- Separation from nuclear family
- · Rekindling of childhood anxieties
- · Communicated anxiety between parents and children
- Cultural expectations

# POST-DISASTER ASSISTANCE MODEL FOR COUNSELING CHILDREN

A post-disaster assistance model for children who may need further assistance should include a diagnostic and treatment service for children and families who identify themselves as needing help and/or are referred for psychological assistance. The model should also provide special consultation services for social agencies that work in the post-disaster program, with direct links between the psychological teams and the agencies. In this way, special problem cases can be referred for discussion and problem-solving to assist the social agencies in obtaining resources for the family and the child.

#### Objectives of Post-disaster Counseling for Children

- To help the child develop an internal sense of perspective so that he/she will be able to organize the environment.
- To assist the recuperative process of sharing painful emotions provoked by the stressor events in order to help the child put events into perspective.
- To help the child reach out to both family members and the emergency teams and use available resources to develop a sense of comfort, security, and affection.

The model should also include a program of regular group discussions with professionals who work with children. The aim of these programs is to help the professionals deal with their current problems and increase their therapeutic, supportive, and healing skills. Because assisting children who are orphaned or separated from their parents following a disaster is such a new component of social welfare systems, professionals need regular help and support in their dealings with the children and in their contacts with relatives.

The following are the components of a model counseling program for traumatized children:

Relationship-building and information-gathering regarding the trauma: The mental health worker describes the purpose and process for assisting children who have been traumatized and then proceeds to gather details about the trauma from family and child.

Assessment of the child and family: The mental health worker gathers information regarding the family structure, the child's experience in the disaster, previous traumatic experiences, addiction patterns, and the presence of consequences or symptoms of post-traumatic stress reactions.

**Trauma interview:** The mental health worker facilitates the child's telling of the traumatic experience through drawings or through role-playing that encourages attention to specific, details including sights, sounds, smells, and accountability for the event.

Identification of post-disaster issues: The mental health worker identifies issues that need to be addressed with the child, such as difficulty coping with nightmares, physiologic reactivity, or impulse control. Issues are also identified for the family, including management of their own and their child's post-trauma consequences and parenting and communication skills.

Crisis intervention methods: Short-term play therapy, activity therapy, family therapy, or group therapy is provided, based on the age of the child and the needs of the family post-disaster. Consultations are held with other service providers, including the school system, social services, and foster parents.

Relapse prevention: The mental health worker helps the child develop skills for coping with post-trauma consequences and situations. The return of some disaster-related problems is expected and viewed as normal. The family is encouraged to return to counseling if necessary.

## Variables Assisting in the Recovery of Families

- Developing structures and networks
- · Establishing reliable schedules
- Choosing activities that enhance self-esteem
- Continued strengthening of social contacts
- Becoming involved in group activities
- Attending to material/personal needs
- · Encouraging relationships and attachments
- · Identifying risk factors
- · Learning about children's reactions at home and in school
- · Using all available help and resources

## Direct and Indirect Impacts of a Catastrophic Event on a Child

#### **Body trauma**

#### pain

#### autonomic arousal

#### increased tension

#### · loss of function

#### Sensory changes

- visual
- auditory
- olfactory

#### (cont.)

#### **Emotional expressions**

- fear
- distress
- anxiety

## Traumatic reactions

- · parents
- siblings
- friends
- extended family

#### Cognitive changes

- language
- communication

#### Disorganization of social system

- school
- religious
- · parents' employment
- housing

# REACTIVE PHASE RESPONSES OF CHILDREN TO A CATASTROPHIC EVENT

#### **Preschool Child**

#### Somatic systems

- Muscular immobilization, hyperactivity
- Temper tantrums, slow movements, not goal-directed
- Disorganization of acquired body functions
- Autonomic nervous system signs, vomiting, crying
- Sleeping/eating disturbances, pale skin, hyperventilation
- Wide pupil stare, startle reactions

#### Affective system

- · Constricted/flat affect
- Detachment
- Rage/aggressive responses
- Fear/worry
- Anxious/suspicious

#### Cognitive system

- Recurrent memories, thoughts, fantasies of event
- · Disturbed dream content
- Decrease of acquired performance, language
- Visual-spatial, concentration
- Distorted description of visual phenomena

#### Social behavior system

- Avoidance, dependence, passive/ intense, energetic/impulsive
- Partial loss of toilet training
- Increased autoerotic activity
- Abrupt, destructive play

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# REACTIVE PHASE RESPONSES OF CHILDREN TO A CATASTROPHIC EVENT (cont.)

#### **School Age Child**

#### Somatic systems

- · Energy level affected
- Movements slow, low-intensity, or rapid, frenetic, impulsive
- Autonomic disorganization; appetite/sleep/ elimination

#### Affective system

- Lability of affect; anxious, sad, giggly, "nervous"
- Cautious; afraid to take chances or return to familiar places
- Increased fear of competition, of losing, of getting lost
- Increased dependency/decreased independence feelings
- Increased susceptibility of emotional reactions to sensory reminders of the traumatic event
- Initial process of mourning and reactions to loss

#### Cognitive system

- Constriction and hypervigilant alertness
- Intellectual functions affected; dull, obtuse
- Obsessive rumination and increased distractibility affecting memory loss
- Decreased associations leading to spontaneous reminder of event characteristics
- Increased fantasizing about how they could have changed events, controlled outcome of the incident
- Appearance of learning problems

#### Social behavior system

- Obsessive-compulsive expressive play, talk, curiosity about event and its consequences
- Inconsistent, capricious reactions to parents
- Argumentative and disobedient
- · Poor impulse control
- Difficulty returning to routines
- Some loss of habits, customs, skills

#### ELDERLY POPULATIONS

Elderly populations have specific reactions and needs after a disaster. Many older adults, especially those who lack resources or have declining physical capacity, lose important support systems in the destroyed neighborhood. They may also have more difficulty in "navigating" the channels of the emergency system. This situation is compounded if older persons are poor, immigrants, or unskilled.

Specific problems of the elderly that aggravate the problems of coping after a disaster include:

- Relocation with family members where privacy, personal space, and daily routines are a source of stress;
- Difficulty with sleeping schedules and relying on sleep medication;
- Sense of disorganization or confusion due to loss of "cues" in daily activities.

The reaction of older individuals to a trauma will be influenced by the impact of what they saw, heard, felt, and smelled, as well as by memories of crises in their past. This revisitation of past events is not simply a product of regression or trigger reactions. It is essentially a normal attempt to ground one's reactions in the familiar.

# ■ GUIDELINES FOR HELPING OLDER PERSONS COPE WITH DISASTER

In working with elderly disaster survivors, mental health workers should place emphasis on restoring confidence and dignity. The following guidelines will help workers assist elderly survivors cope with the aftermath of a disaster:

Rebuild and reaffirm attachments and relationships: Nurturing and physical closeness is needed. Let older persons identify those to whom they want to be attached; however, do not assume family relations are friendly.

Consider their concern about safety: The elderly need to know they have options in making a choice about their safety. Evacuation is a highly controversial issue in disaster. Older adults may be less safe in evacuations than if they remain in their homes (if this is feasible).

Talk about the tragedy: Remember that older persons may be venting feelings about their lives, not about the immediate event. Do not attempt to prevent this venting, since validating past concerns is an important part of establishing trust in preparing to deal with current concerns. The elderly may also respond well to music and opportunities to paint or create art that communicates their reactions.

Anticipate communication lapses: In conversations, the elderly may go back and forth from the past to the present. Workers may be confused by an individual's discussion of past events or past relationships in terms of the present disaster experience. It is important to remember that the discussion may be entirely rational and logical from the perspective of the individual.

Understand that stress inhibits memory: If an older person forgets a name, place, or portion of an event, the worker should take great precautions to avoid placing pressure on the elderly person to remember.

Prepare for sporadic conversation: Workers should be prepared for the elderly to talk sporadically about the disaster, spending small segments of time concentrating on particular aspects of the traumatic experience as a method of defense.

Provide factual information: Older adults want factual information, but may be able to absorb the facts only in limited quantity. Often, they ask to have information about the disaster repeated a number of times. Eventually they will integrate it and gain better control over their emotions about the event.

Make short-term predictions: Specific times and places for changes should be made clear. It will help to delineate events on a calendar or clock so that the older person can more easily track the future. Workers should spend time addressing basic needs in a detailed way, such as who will help the older person, where the person will stay at night, where he/she will get clothes, and what property may be rescued from their destroyed homes.

Establish routines quickly: It is best to reinitiate old routines if possible, since routines are considered an anchor in aging.

Reassure about normal reactions: The worker should reassure the elderly that lapses of concentration, memory losses, physical ailments, and depression are normal reactions to the abnormal post-disaster situation that may have nothing to do with the aging process.

#### Reactions to Traumatic Events among Elderly Populations

- Fear of mortality
- Need for permanence
- · Wish to reconnect with past and with friends
- Regression
- Generally temporary state
- --- May be long-term regression of severe, chronic condition
- May move in and out of regressed state during relocation
- Multiple Losses
- Fear of relocation to unknown neighborhood
- Fear of losing their dignity
- Loss of hope for the future
- Loss of cherished mementos
- · Need to integrate loss into context of life
- Disorientation as routine is interrupted
- · Sense of denial as a normal defensive reaction to trauma
- Immediate fear response, followed by anger and frustration when unable to control a situation
- · Physiological responses
- Sleep disturbances
- Appetite disturbances
- Crisis episodes

#### PERSONS WITH MENTAL ILLNESS

Historical changes in the care of people with mental illness and homeless persons living in the community have resulted in at-risk populations needing special help after a disaster. Although the number of such individuals housed in shelters or in damaged dwellings may be small in comparison to the total population, each case may need skillful handling and different approaches. Most disaster survivors who have existing mental problems will need additional help beyond crisis intervention.

Individuals suffering from a diverse variety of mental illnesses will exhibit differing reactions to the many stressors following a disaster. In a post-disaster situation, these individuals will fall into three major categories:

Individuals living in hospitals in the damaged areas: For these individuals, problems in their daily living arrangements will have been disrupted by interference with the availability of electricity, water, food, medical care, and nursing staff.

Individuals living in group homes: These individuals may be affected by loss of their homes, alteration of their surroundings, or limited access to medication. The loss of a familiar setting may increase the acuteness of their emotional reactions, which may, in turn, be manifested as symptomatology.

Individuals living with their own or foster families: These individuals also may have increased symptoms due to factors similar to those for individuals living in group homes.

If individuals are accompanied by a familiar adult helper, it may not be difficult to ascertain the diagnosis and the medication needed. This is not the case if the individual is discovered alone; in such cases, the signs of disturbance in cognition, disorientation, and severe difficulty in explaining who he/she is will make it clear that this is an individual who needs special attention. Individuals who cannot follow simple, life-preserving instructions will need individual monitoring. However, during a disaster, it is always necessary to rule out any undiagnosed head injuries that might cause similar symptoms.

Individuals who manifest behavior that appears inappropriate for the situation should be given a rapid assessment. The crisis worker should ask for consultation to differentiate between individuals suffering from acute stress and those with mental illness according to whether they exhibit the following conditions:

# Stress reactions

Changes in cognition-orientation, memory, thinking, and difficulty in decision-making; changes in emotions, lability, blunting, flatness; no break with reality awareness or loss of self-identify; behaves within social conventions and relates in a passive way.

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Acute psychotic reactions

Expressions of anxiety, affective, and thinking behaviors; subdued response to emergency; ranges from apathetic, depressed, expressing bizarre thinking or difficulty in understanding to hyperactive, manic, unrealistic, and difficult-to-control behavior.

Effect of head injuries Signs can mimic the characteristics of many psychiatric disorders; a neurological exam may show signs of trauma.

A number of individuals with mental illness are dependent on medication, and obtaining information about their regimen should be a priority. This should be followed by an attempt to structure their schedules and remove the patients from intense stimuli situations whenever possible. Using other survivors to assist in basic daily living activities may also be beneficial.

Disaster survivors are suddenly and painfully thrown together into a desperate and unfamiliar setting. The behaviors that emerge as they try to cope and adapt could be defined as "antisocial" if they break rules, do not accept schedules, refuse to take their turn dealing with helpers, or are identified as "trouble-makers" who may also steal and lie. Diagnosing these behaviors and sorting out which are motivated by anxiety and which by character disorders can challenge the skills of disaster workers. Because diagnosis must be rapid during the emergency phase, it may be difficult to ascertain the motivating emotions driving antisocial behavior. The best approach is to increasingly set limits on disruptive actions.

Survivors who act out due to anxiety will experience relief if structure and support are provided. They will express mortification or guilt, and will verbalize some of their fears. In the case of aggressive, self-centered, and nonempathetic individuals, crisis workers need to use stronger measures, including segregation from the group, until more individual measures are available.

Except for those with severe cases, most individuals with mental retardation will not need special measures other than instructions on how to manage in the shelter or obtain resources offered by agencies. Some careful explanation of what has happened and what plans have been made for the next few months may be of great relief to them. In cases where mental retardation is severe and accompanied by physical handicaps, it may be necessary to ask another survivor to assist in daily hygiene, feeding, and sleeping activities.

## PERSONS WITH HIV/AIDS

Individuals with HIV/AIDS present special challenges to the post-disaster worker. Due to the widespread myths and lack of knowledge about the transmission of HIV, survivors develop fear and anxiety when they find out that an individual who is

HIV-positive is living, sleeping, or using the toilet facilities near them in a shelter. Mental health workers can help educate survivors and other crisis workers to reduce the fear of infection.

Reliance on disaster workers with different educational and professional backgrounds results in a mix of values, attitudes, and cultural characteristics, as well as various levels of emergency preparedness.

In a disaster, there is a phenomenon of focusing on some problem, perhaps even a small one, that may provide some sense of control for disaster survivors. Experienced disaster workers are more comfortable with HIV/AIDS-related information than new, inexperienced workers.

The following is a summary of the HIV/AIDS knowledge base needed by workers in post-disaster programs:

- 1. Recognition that individuals with HIV/AIDS are a new at-risk population in disaster assistance planning.
- 2. Identification of the unique needs of HIV-infected survivors, including medical, psychosocial, and legal needs.
- 3. Development within emergency agencies of clear lines of responsibility for the needs of individuals with HIV/AIDS in shelters, specialized housing, and hospitals.
- 4. Planning in a coordinated structure to link medical and government agencies to address the needs of survivors diagnosed with HIV/AIDS.
- 5. Incorporation in all training and emergency manuals of emergency care guidelines for the care of disaster survivors with HIV/AIDS.
- 6. Development of an inventory of existing and potential resources to respond to HIV/AIDS-related problems, including availability of health and mental health personnel; capabilities of the public health system, prison system, and mental health institutions; and preparedness of existing community-based organizations and networks.
- 7. Development of training materials about disaster management for incorporation in all community HIV/AIDS training programs.
- 8. Development of a "shelter-model" process to deal with the day-to-day problems of disaster survivors living with individuals who are HIV-infected or have AIDS.
- 9. Development of community emergency models that focus on preplanning and prevention approaches to the care of HIV-infected disaster survivors.
- 10. Awareness of the legal rights of individuals with HIV/AIDS.
- 11. Consultation with mental health agencies and HIV/AIDS agencies regarding medical and nonmedical mental health personnel and health personnel specially trained for disaster work.
- 12. Specialized training in mental health management during times of disaster to encourage therapeutic attitudes for survivors with HIV/AIDS.

# INDIVIDUALS WITH SUBSTANCE ABUSE PROBLEMS

Individuals who are dependent on drugs or alcohol raise difficult management issues for post-disaster programs. In the impact phase, individuals who are addicted to drugs will manifest physiological signs of withdrawal when the drug is unobtainable. Behavior and speech will identify drug users who understand the reality of not being able to obtain the needed substance. A list of the commonly observed psychophysiological manifestations of drug withdrawal should be available for all disaster personnel.

The degree of effort needed to assist an individual who is showing symptoms of drug withdrawal will depend on the life-threatening potential and the degree of pain and discomfort. The mental health worker needs to work closely with medical personnel to assist in the treatment of these survivors. After the acute phase is controlled, a psychosocial crisis intervention is the recommended method of assistance.

#### **SIGNS OF DRUG ABUSE AND ADDICTION**

The following signs of drug withdrawal can be expected from substance-abusing survivors when they have no access to drugs following a disaster:

- · Apprehension or vague uneasiness and fear of impending catastrophe;
- Muscle weakness evident even on mildest exertion;
- Tremors that are coarse, rhythmic, nonpatterned, evident during voluntary movement and subsiding at rest.
- Psychoses and/or delirium, usually resembling delirium tremens ("DTs"); acute panic attacks may occur.

## ■ SIGNS OF ALCOHOL ABUSE AND ALCOHOLISM

Individuals who are addicted to alcohol will show differing signs of central nervous system irritability and general discomfort, but most will "weather" the acute stage of the post-disaster period. If the behavior and central nervous system signs are dysfunctional, the individual will pose a problem for the personnel in charge of managing the shelter. Generally, these individuals become difficult in a passive-aggressive manner, rather than actively and aggressively disrupting living areas.

The following are signs and symptoms of alcohol withdrawal:

- Mild or early symptoms (impending delirium tremens) may appear in the first week after the last drink.
- Gastrointestinal, muscular, central nervous systems are affected.

- Vegetative (sleep) and characteristic psychological and behavior patterns may emerge.
- Advanced or severe manifestations, including the emergence of increased irritability, severe tremulousness, and auditory hallucinations, may be indications of imminent delirium tremens.

#### POST-DISASTER WORKERS

Disasters bring together emergency service workers from diverse backgrounds. Some arrive immediately with clear responsibility and priority assignments. Others arrive with different levels of previous experience and skills and different assigned post-disaster jobs. All emergency workers attempt to be helpful and proceed to rescue the wounded, gather the dead, and use triage methods to determine the priority of intervention. They work long hours with little thought to food or sleep. This group of workers represents a challenge for planning and operationalizing a program of post-disaster intervention.

Each type of post-disaster worker works within different organizations that interrelate within the common goal of disaster assistance. After individuals are recruited to a site to help, there is little opportunity to identify or work out a good fit between worker and assignment. This situation generally produces role conflict, ambiguity, and discomfort. Workers generally have multiple functions. They often attend to diverse, and at times, conflicting, needs of survivors.

The mental health worker should focus on the emotional impact of these stressors on disaster workers, as well as their reactions, behavior, and feelings, as a guide for selecting the best methods of helping them do their jobs. These reactions can range from good coping and growth to pathological and chronic sequelae that leave a dysfunctional individual and persist for months after the worker has returned to his/her home and previous job.

#### **BURN-OUT**

"Burn-out" is the term used to describe the many aspects of the occupational stress experienced by disaster workers. Most disaster workers are not taught to look for, identify, and address their own physical and emotional needs. They often do not acknowledge that their needs are normal in these very abnormal situations. They often fail to understand that, unless they meet their needs continually, they will not be able to function in a supportive, consistent, and sensitive manner.

The following factors have been identified as barriers to the use of preventive methods to diminish burn-out:

- High professional standards and high self-expectations;
- Reluctance or discomfort in discussing feelings for fear of showing weakness and doubt about performance;

- Denial or suppression of feelings during difficult situations in order to function;
- Discomfort in acknowledging and discussing feelings as soon as they emerge;
- Fear that acknowledging the need for help will reflect negatively on job performance evaluation and opportunities for promotion;
- Difficulties in judging one's own reactions and performance when overwhelmed and distressed;
- Shame over the contrast between one's personal situation and that of survivors.

Various approaches are available to disaster planners and program directors to prevent burn-out and assist disaster workers. These methods help workers acquire techniques and skills for coping with stress. The need for exercise, diet, relaxation, and recreation is now recognized in employment conditions.

"Debriefing" focuses on the cognitive and emotional reactions of workers who are trying to cope with novel internal sensations that accumulate from their painful experiences. These debriefing interventions are done in small groups, with specific objectives and confidentiality boundaries.

The structure of the debriefing includes the following sequence of processes:

- Description of the workers' activities in interacting with survivors;
- Identification and recognition of paradoxical and unusual emotional reactions of workers;
- Recognition of ambivalent feelings in some situations;
- Linkage of feelings to disturbance of sleep and appetite, impulse control, and irritability.

The mental health "leader" summarizes the discussion, answers questions, and reinforces the message that the emergency workers' responses are normal reactions to abnormal situations. A critical incident session is generally conducted with individuals who have participated in extremely traumatic situations and are experiencing signs of psychophysiological stress. The session is confidential and nonjudgmental.

#### **Conditions Present in Occupational Stress**

- Time pressures
- Work overload
- · Minimal positive reinforcement
- · High probability of conflict
- Prolonged expenditure of energy and attention to survivors
- Coincidental incidents of crisis involving several survivors at the same time
- Personal crisis in the life of the post-disaster worker

#### **READING LIST**

American Academy of Pediatrics Work Group on Disasters. *Psychosocial issues for children for children and families in disasters.* Washington, D.C.: U.S. Department of Health and Human Services; 1995. (DHHS Publication No. (SMA) 95-3022).

Burke JD, Borus JF, Burns BJ et al. Some factors in the emotional reaction of children to disaster. *American Journal of Psychiatry* 1982;139:1010-1014.

Cohen R, Culp C, Genser S. Human problems in major disasters: a training curriculum for emergency medical personnel. Washington, D.C.; Government Printing Office; 1987. (DHHS Publication No. (ADM) 87-1505).

Cohen RE. Intervention program for children. In: Lystad M (ed.). Mental health for mass emergencies: theory and practice. New York: Brunner/Mazel; 1988: pp. 262-283.

Cohen RE, Poulshock S. The elderly in the aftermath of a disaster. Gerontologist 1975;15:357-361.

Duckworth DH. Psychological problems arising from disaster work. Stress Medicine 1986;2:315-323.

Dyregov A. Caring for helpers in disaster situations: psychological debriefing. Disaster Management 1989; 2: 25-30.

Eth S. Responding to disaster: a guide for mental health professionals, clinical response to traumatized children. Washington, DC: American Psychiatric Press, Inc.; 1992: pp. 101-123.

Faber NIL, Gorton N. Manual for child health workers in major disaster. Rockville, Maryland: National Institute of Mental Health; 1986. (DHHS Publication No. (ADM) 86-1070).

Hartsough DM, Myers DG. Disaster work and mental health: prevention and control of stress among workers. Rockville, Maryland: National Institute of Mental Health; 1985. (DHHS Pub No (ADM) 85-1422).

Kenardy JA, Webster RA, Lewing TJ, Carr VJ, Hazell PL, Carter GL. Stress debriefing and patterns of recovery following a natural disaster. *Journal of Traumatic Stress* 1996; 9:37-49.

Kilinanek T, Drabek T. Assessing long-term impacts of a natural disaster: a focus on the elderly. *The Gerontologist* 1979;19(6):555-566.

Klingman A, Koenigsfeld E, Markman D. Art activity with children following disaster. Arts Psychotherapy 1987;14:153-166.

Krause N. Exploring the impact of a natural disaster on the health and psychological well-being of older adults. *Journal of Human Stress* 1987;13(2): 61-69.

McFarlane AC. Post-traumatic phenomena in a longitudinal study of children following a natural disaster. Journal of the American Academy of Child and Adolescent Psychiatry 1987;26:764-769.

Mitchell JT. Helping the helper. In: Lystad M (ed.).: Role stressors and supports for emergency workers. Washington, D.C.: Government Printing Office; 1984: pp. 105-118. (DHHS Publication No. (ADM) 85-1908).

Mitchell JT. Too much help too fast. Life Net 1995; 5:3-4.

Mitchell JT. When disaster strikes: the critical incident stress debriefing. Journal of Emergency Medical Services 1983;8: 36-39.

National Institute of Mental Health. Preventive and control of stress among workers: a pamphlet for workers. Rockville, Maryland: NIMH; 1987. (DHHS Publication No. (ADM) 87-1496).

National Institute of Mental Health. Responding to the needs of people with serious and persistent mental illness in times of major disaster. Rockville, Maryland: NIMH; 1996. (DHHS Pub. No. (ADM) 96-3077).

Phifer JF, Kaniasty KZ, Norris FH. The impact of natural disaster on the health of older adults: a multiwave prospective study. *Journal of Health and Social Behavior* 1988;29:65-78.

Shalev AY. Debriefing following traumatic exposure. In: Ursano RJ, McCaughey BC, Fullerton CS (eds.). Individual and community responses to trauma and disaster: the structure of human chaos. Cambridge: Cambridge University Press; 1996: pp. 201-219.

Talbot A. The importance of parallel process in debriefing crisis counsellors. *Journal of Traumatic Stress* 1990;3: 265-278.