Introduction

During a disaster situation, there are individuals within the general population who may be more significantly affected than others and who are at greater risk for negative outcomes. From a public health standpoint, and as part of disaster response strategic planning, it is imperative that these groups are identified, in advance, so their needs can be addressed within the wider framework of the post-disaster mental health response.

Several agencies have identified a number of potentially vulnerable groups that may require or benefit from specific post-disaster interventions. Issues affecting each of these groups are discussed in this chapter. These groups are as follows:

- People with pre-existing mental disorders
- Children and adolescents
- Gender-based vulnerability (women)
- Older persons
- Homeless persons
- Indigenous peoples
- People living in shelters

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First responders, who provide direct disaster assistance, are also considered a vulnerable population. More information regarding this group is included in Chapter 12.

When addressing the needs of vulnerable people following a disaster, it is essential to keep in mind that the information provided in this document is meant to guide the development and application of interventions that can be used in addition to providing basic health care. It is also important to stress that all interventions be delivered in culturally appropriate ways.

**Persons with pre-existing mental disorders**

Persons with pre-existing mental disorders are a vulnerable group and frequently neglected during disasters or emergency situations, whether they live in the community or are residents in institutions.

Persons with mild to moderate mental disorders may present at primary health care or emergency facilities with unexplained, somatic complaints. By contrast, those with severe mental disorders may not search for help at all, for reasons such as isolation, stigma and fear of being rejected, lack of knowledge or awareness of their own situation, or because of limited access to services (4). Furthermore, these persons may have been abandoned by their families as a consequence of the disaster and or displaced from their place of residence. In the absence of their usual support networks, these persons may be unable to receive needed care and/or to recognize the possible danger of their condition. This is the case in temporary shelters or camps for displaced persons, where it is common “to see persons wandering lost, terrified, unfed, perhaps with verbal and physical signs of abuse” (5).

Once persons with mental disorders are identified (by asking relevant governmental and nongovernmental agencies and by visiting existing institutions), it is important that they receive appropriate protection and needed attention to ensure immediate continuity of care and avoid interruption of ongoing treatment (4).

In many countries, particularly those with limited resources, the development of services for persons with severe mental disorders are inadequate to meet the needs of the population (6). A lack of knowledge regarding adequate organization of services as well as the stigma against persons with mental disorders contribute to the limited development of mental health systems. A disaster may cause damage to structures, dispersion of qualified personnel, competing and urgent medical priorities, or other difficulties that will exacerbate the poor existing conditions, rendering facilities inaccessible or inadequate to meet the needs of affected population (5).

Another important aspect to consider is that personnel providing emergency care may have little or no experience in recognizing mental disorders and managing persons suffering from these conditions. It is important for health care providers to receive basic training that will help them to identify and treat mental disorders. This training should be spread over a period of time, in combination with appropriate supervision and follow-up (5). It is equally important that psychotropic medication is available (see Chapter 10 on Post-Disaster Psychotropic First Aid Kit and Chapter 8, Box 8.2 on the WHO mhGAP program) and that
primary care practitioners are authorized to prescribe these drugs, as recommended by internationally agreed guidelines (4).

The training and supervision offered to health care practitioners should be combined with training for family members and community volunteers. These groups can provide psychosocial support as an important component of a comprehensive care approach.

Recommended measures (4, 5) for attending to the specific needs of people living with severe mental disorders who are confronted with a disaster situation are listed in Box 9.1.

Box 9.1
Recommendations for supporting persons with pre-existing mental disorders

- Assess pre-existing structures as well as the impact of the emergency on those services.
- Identify people with severe mental disorders that require assistance.
- Provide medical and psychosocial interventions to relieve symptoms.
- Provide protection and support to restore functions.
- Ensure adequate supplies of essential psychiatric drugs in all emergency drug kits.
- Enable at least one member of the emergency primary health care team to provide frontline mental health care.
- Train and supervise available primary health care staff in the frontline care.
- Establish mental health care at additional, logical points of access.
- Avoid the creation of parallel mental health services focused on specific diagnoses (e.g. PTSD) or on narrowly-defined groups (e.g. widows).
- Educate and support existing care givers.
- Inform the population about the availability of mental health care.

In the Caribbean, many individuals living with severe and persistent mental disorders or mental disabilities may reside in long-term care institutions. These persons require special attention, as they form a particularly vulnerable group. They may have been abandoned by personnel and left unprotected from the effects of the disaster. After many years of living in institutions, these persons may have lost their capacity to react during an emergency. Away from their families and isolated, the context of emergency may create further anxiety, agitation, or withdrawal (4).

In cases where there is structural damage to a facility, or where staff abandons the facility as a consequence of the disaster, the institution’s residents may remain without appropriate “clothing, feeding, shelter, sanitation, physical care and basic treatment (including medication and psychosocial support) (4).”

It is important that professionals responding to the emergency ensure that these persons receive appropriate, comprehensive care, always respecting the human rights and dignity of these persons. Box 9.2 offers recommended actions for people living in psychiatric institutions.
Children and adolescents

Children and adolescents are largely dependent on their families to supply basic needs such as shelter, food, and economic support, as well as to fulfill many of their social and emotional needs. Youths under age fifteen represent one-third of the population in most English-speaking Caribbean countries. Their roles and activities are dynamic, changing overtime as they get older, gain more independence, and acquire responsibilities; however, even older adolescents are frequently still dependent on their families for basic needs.

It is also important to consider that for most children and adolescents school is a significant component of their day-to-day lives, not just for education, but also for social interaction and as a support network. Post-disaster interventions addressing the needs on any level for children and adolescents must include both family and educational institutions and should be delivered in developmentally appropriate ways.

In this context, while mental health services may have an important role to play, many of the initial post-disaster mental health interventions will be better provided not by specialized mental health or pediatric health services, but by appropriate community agencies and educational institutions. Ideally, these should be partnered with those specialized service providers that are already working in the area.

A child’s reaction to a disaster situation is influenced by a number of factors (see a complete description in Table 7.2). Regardless of age, children may demonstrate difficulties in being away from their primary caretaker and exhibit a variety of sleep disturbances, including difficulty falling asleep, nightmares, and fear of the dark.

Acute Stress Reaction (ASR) is common and expected in the immediate post-disaster setting and young people experiencing it are best helped by activities designed to “normalize” their daily experience. This means addressing immediate daily living needs and returning to usual activities as rapidly as possible.

Post-traumatic stress disorder (PTSD) and depressive disorder may occur but are not diagnosable until four weeks and two weeks, respectively, after the initial event.
Chapter 9
Support for Vulnerable Groups Following a Disaster

Box 9.3
What is normally expected in children and adolescents following a disaster?

- Feelings of anxiety, fears, and worries about safety of self and others (more clingy to teacher or parent).
- Worries about re-occurrence of event.
- Increased levels of distress (whiny, irritable, more “moody”).
- Changes in behavior.
- Increased somatic complaints (e.g., headaches, stomach-aches, aches and pains).
- Changes in school performance.
- Recreating event (e.g., talking repeatedly about it, “playing” the event).
- Increased sensitivity to sounds (e.g., sirens, planes, thunder, backfire, loud noises).
- Statements and questions about death and dying.

8). These disorders will require mental health interventions (9).

Preliminary research has identified two risk factors in children and youth that influence the presence of post-disaster mental health problems. They are the previous level of family psychopathology and family poverty (10). It is well understood that the psychological well-being of the parent is directly linked to the well-being of their child. This underscores the importance of providing post-disaster physical, social, economic, and psychological support for Caribbean mothers who tend to be the major providers of child care following a disaster (11).

The application of Critical Incident Stress Debriefing or Critical Incident Stress Management interventions is not likely to be helpful and may even lead to negative outcomes. There is no evidence that these forms of psychological debriefing are helpful for children, youth, or families (12).

The post-disaster mental health response for children and youth must be addressed in two stages: The first or immediate stage focuses on providing safety, shelter, and security to children and teenagers within the context of their community, school, and family. Except for unique circumstances or for enhanced needs associated with known, ongoing mental disorder, mental health specialists are not required. The second or emergent stage requires ensuring that these young people are able to access mental health care according to their need. Recommended actions for children and youth in post-disaster settings are summarized in Box 9.4.
Providing mental health care for children and adolescents in the primary care system

It is essential to enhance the primary care system’s capacity to identify and effectively intervene with children and adolescents demonstrating prolonged and extensive disturbances in their mental well-being or signs and symptoms of mental disorder. Given the lack of services specializing in child and adolescent mental health in the Caribbean region, much of the burden of care will necessarily fall on existing primary care facilities. Health care providers will need to be educated in the identification, diagnosis, and most appropriate types of intervention for children and youth prior to the onset of a disaster, since waiting to carry out this type of training until after the disaster would be too late.

First responders should similarly be educated in what the normal and expected emotional responses of children and youth are to traumatic events, and how to provide emotional support to children, families, and community. They should also be well versed in how to best access primary health care services (or specialty mental health services, if needed) for assessment, diagnosis, and treatment for those young people who may require additional care.

Box 9.4
Recommended actions for children and youth in post-disaster settings

- Ensure that basic needs such as water, food, shelter, safety, and emotional support are met.
- Ensure that children are reunited with their parents or usual caretakers as soon as possible.
- Return to routine daily life as soon as possible (including school).
- Support mothers and other caregivers to care for their children. Children supported by caring adults who allow them to talk about their experiences and help them to cope with everyday problems and fears are less likely to develop negative outcomes.
- Mothers and other caregivers need to be taught about the expected response of their children to trauma and coached in the type of interventions that may be necessary. For example, corporal punishment for “misbehavior” should be replaced with interventions that promote self-soothing and stress reduction (such as holding and stroking the child, providing their favorite toy, etc.)
- Provide space and opportunity for play.
- Ensure that schools are prepared and functional as soon as possible.
- Develop short- and long-term mechanisms for emergency departments to deal with the unique needs of children and youth with mental health and substance use disorders and their families.
- Promote and adopt family and community engagement strategies in emergency departments including the use of trained family members to assist in service planning and delivery.
- Adopt proven and effective evidence-based strategies for emergency care for children, youth, and their families with mental health and substance use disorders.
- Provide consultation to professionals in schools, health care settings, spiritual settings, and other service systems who see trauma-exposed children and families.
- Obtain training in developmentally and culturally appropriate evidence-based therapies for child trauma to effectively treat children who do not recover on their own.
Maintaining specialty services for children with pre-existing mental disorders

It is important to be able to identify children at risk for most negative mental health outcomes, including young people with pre-existing mental health problems and mental disorders. Thus, existing mental health services that can assess, diagnose and provide the best evidence-based care for children and adolescents must be maintained. Additionally, primary health care providers, teachers, parents, and other community workers must be educated to recognize children and youth who show signs of significant mental health problems or mental disorders. Establishing and maintaining the linkage between specialty and primary care services, with clear referral procedures, must be a priority in the post-disaster period.

Public and professional education

Primary health care providers, teachers, parents, and the general public need to be educated on how to identify children and youth who show signs of significant mental health problems or mental disorders.

The public must be well informed prior to any disaster situation about the expected and normal emotional responses to a disaster (see Chapter 7) and should also be provided with information on strategies to help maintain mental health, signs of mental illness, and available resources for assessment and treatment.

Gender-based vulnerability

Knowledge of the different gender roles in the Caribbean should be used to develop gender-sensitive mental health plans as part of disaster preparedness. This knowledge should include the different roles of men and women in the family and the community as well as gender differences in the way in which health services are accessed. Mental health disaster preparedness plans should include input from both genders at all life stages, demonstrate an awareness of the gender roles in society, and identify and provide for sex-specific challenges, vulnerabilities, and needs (15).

In this context, it is important to understand the concept of gender vulnerability to disaster. While not all women are equally vulnerable and many men are also vulnerable, considerable cross-cultural research has shown that women are generally more vulnerable to disaster than men (see Box 9.5) (16). For biological reasons such as physical disability and age, both women and men can be vulnerable to the negative impact of a
disaster. For women, the most significant biological factors increasing their vulnerability are pregnancy and lactation, due to heightened nutritional needs and reduced physical mobility.

Men face an increased risk of morbidity and mortality due to their social roles as protectors and defenders of the household. They are more likely to participate in search and rescue operations, and are less likely to evacuate to shelters in the short-term. For women, pre-existing vulnerabilities often relate to an inferior position in the social structure, including: lack of access to wage income, transportation, communication, and education. Such vulnerabilities can prevent women from learning about evacuation warnings, utilizing shelter options, or putting aside assets as “insurance” against potential disaster. The accepted role that women play as caregivers for children, older persons, and the disabled further increases their vulnerability to disasters by limiting their mobility and increasing their workload (17).

Many Caribbean households are led by women who are tasked with providing for both the financial and psychological needs of their children and dependent older persons. This can result in an enormous physical, social, economic and psychological burden post-disaster (18).

Men and women have different post-disaster coping mechanisms. Women’s psychosocial symptoms following the disaster are more frequently characterized by depression, anxiety, sleeplessness, and migraine headaches; men tend to present risk-prone and dysfunctional social behaviors such as aggression (19).

It is important to note that community cohesion in the Caribbean is also highly linked to social networks created by and maintained by women. This includes a variety of activities such as community-based child welfare. Undertaking post-disaster interventions in the Caribbean will be more effective if they are delivered through the women in these already existing networks. Women are also more likely to seek medical attention for themselves and family members. Information about service availability and accessibility is more effective when delivered through women and their social and institutional networks. Men are less likely to seek medical attention or to encourage others to do so, making them vulnerable to suffering delays in diagnosis and treatment of mental disorders (20).
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Box 9.6
Recommendations regarding women when planning for and responding to disasters (22)

- Special care should be given to pregnant and breastfeeding women and women with young children.
- Women’s reliable and regular access to food and clean water is important because women typically take care of food and water for children, older persons, and the entire family.
- Identify specific needs of women: Ask the women. Women are most aware of the needs of their family and any urgent needs.
- Female-specific requirements, such as sanitary pads and underwear, must be included in the list of emergency supplies. Vitamins and other supplements should be provided to pregnant and lactating mothers.
- Breast milk substitutes should be included in food aid packages for families with infants, as it is not uncommon for mothers under stress to have lactation difficulties in disasters.
- Provide adequate separate toilets and bathrooms for women as well as dressing rooms and breast-feeding stations for women.
- Provide adequate shelter and housing. Temporary shelters, including tents, must be comfortable and habitable. In disaster situations, women tend to spend more time in shelters than men.
- Ensure security and safety of women and children. In some post-disaster situations, women may be at physical and emotional risk from groups of men, gangs, and even civil authorities.

Another issue to consider during the emergency and rehabilitation phases is the creation of new vulnerabilities, or “second-generation disasters” that result from the interventions themselves. For women and girls, the most frequent example is an increased risk of becoming the victim of physical and sexual violence in temporary shelters and public spaces. For men, problems of alcoholism and aggression often emerge or are exacerbated when they feel idle and unable to contribute to their families’ well being (21).

Older persons

In an emergency situation, older adults may be less likely to heed disaster warnings, can be reluctant to leave their homes, may require more functional assistance, and are more likely to have chronic medical and/or psychiatric conditions. They are also prone to suffer health-related consequences as a direct result of a disaster and will require longer recovery periods for these problems. They are also at increased risk of abuse or exploitation. Frail older persons and other vulnerable adults have physical and cognitive characteristics that reinforce the need for a specialized disaster response strategy (23).

Specialty mental health services for older adults are not usually available in the Caribbean. Older persons demonstrate a variety of unique challenges that may impact their response to a disaster. These include, but are not limited to: diminished sensory capacity, decreased mobility and physical frailty, income shrinkage and financial limitations, loss of friends and social status, isolation and loss of life-long partners, changes in housing, multiple medications, complex medical problems, ill health, cognitive impairment, and impaired self-care (24). Interventions directed at older persons are outlined below.
Providing mental health care for older adults in the primary care system

The primary care capacity to identify and address mental health needs of older adults must be enhanced prior to the onset of a disaster. Primary health care providers must be educated to identify, diagnose, and recognize the most appropriate interventions for mental health problems and mental disorders in older persons. Older persons suffering from perceptual challenges such as difficulties in hearing or vision will require more considerate and compassionate interactions (25).

First responders should be educated about the normal and expected emotional responses that older persons may present following a traumatic event and how to provide appropriate emotional support. The rapid establishment of daily routines is essential for the older person, as he or she may suffer from a variety of cognitive difficulties that require simple and frequently repeated information. In addition, the stress caused by the disaster may exacerbate or precipitate cognitive problems.

First responders must be able to access primary health care services (or specialty mental health services, if needed) for assessment, diagnosis, and treatment for those who may require additional care.

Maintaining specialty services for older persons with pre-existing mental and physical disorders

It is important to identify those older persons who are at greater risk for negative mental health outcomes, such as those with pre-existing physical and mental health problems. Many mental health problems in older persons can be traced to health problems, which make it imperative that the physical health status be properly assessed.

Thus, existing health and mental health services that can diagnose and provide the best evidence-based care for older persons must be maintained. Additionally, primary health care

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**Box 9.7**

**Recommendations to support the emotional well-being of older persons** (26)

- Focus first on post-disaster priorities such as water, food, shelter, safety, and emotional support.
- Ensure that older persons are reunited with their families or caregivers as soon as possible.
- Return to the daily routine as soon as possible.
- Provide attention to functional needs (including self-care and mobility).
- Teach family members and caregivers about expected responses of older adults to trauma and provide coaching on how to give care.
- Ensure that older persons have fair and equal access to resources and protection against abuse and exploitation.
- Ensure an adequate supply of medicines to minimize interruption of any ongoing treatments.
- Older persons may require additional attention in terms of receiving clear, consistent and repeated assurances, explanations of what is happening, and directions on what to do.
providers, family members, and care providers need to be educated about how to identify older adults who are showing signs of significant mental health problems or mental disorders. The public should be well informed prior to any disaster situation about the expected and normal emotional responses to a disaster and should also be provided information on strategies to help maintain mental health, signs of mental illness, and available resources for assessment and treatment.

Recommendations for supporting the emotional well-being of older adults in disaster situations are presented in Box 9.7.

**The homeless**

The number of homeless in the Caribbean is not known and services targeting the homeless are not universally available. The homeless face enormous challenges accessing help, transportation, and medical care, even in non-disaster situations. In the aftermath of a disaster they have difficulty maintaining communication with family and care providers, and are even more vulnerable (27). Furthermore, the homeless population tends to be scattered throughout the community and may not be easily accessible to first responders. Some homeless individuals may actively avoid contact with social agencies or the police if they have had previous negative experience with them. They often have limited capacity to find shelter and obtain and store water, food, and medication. They may be excluded from established modes of emergency registration, communication, and notification. They have limited and often fragmented support systems within the community, which decreases their capacity to cope following a disaster. This hinders their ability to identify and access shelters or evacuation services. Stigma associated with homelessness also creates a barrier to care, both in pre-disaster and post-disaster settings (27).

Compared to the general population, the homeless population exhibits a higher prevalence of mental illness, substance abuse, physical illness (such as infectious diseases and chronic disorders), and suicidal behaviors. These phenomena increase the risk for negative mental health outcomes with an inverse correlation between the health needs of the homeless and their ability to receive care in the post-disaster situation. Despite these needs, the homeless may not be included in the development of post-disaster plans (27). This situation may be particularly problematic in developing countries, including in the Caribbean.

**Box 9.8**

**Recommendations for assisting the homeless in disaster situations** (28)

- Humanitarian workers must heightened awareness of the need to identify and locate homeless individuals.
- The homeless have both mental and physical health needs and these needs must be met concomitantly in the post-disaster period.
- Extra effort may be required to engage the homeless, particularly if they have had negative experiences with service providers.
- Efforts to locate the homeless must include those people who best understand how to reach them (for example, shelter staff).
It is important that homeless individuals are treated equitably and with respect. Recommendations regarding their specific needs in disaster situations are presented in Box 9.8.

**Indigenous peoples**

In normal circumstances, indigenous populations suffer from a range of health problems at higher rates than the general population and they continue to have substantially shorter life expectancy. The mental health needs of indigenous people in the Caribbean have not been well documented and few services are available to meet their unique cultural, social, and economic situations. As a group within the Americas, they are at higher risk for a variety of negative mental health, social, and economic outcomes. Mental health care for indigenous peoples remains a low priority for health and social care agencies and local governments, and substantive research pertaining to their post-disaster mental health needs in the Caribbean is not available (29, 30).

Many indigenous people may have had negative experiences with the mainstream health care system, often because of cultural differences between the client and the health care provider. They may have experienced denigration of their cultural identity, beliefs, and lifestyles by service providers including doctors, nurses, teachers, social workers, clergy, and others (31).

There are many obstacles to improving mental health care for indigenous peoples in post-disaster situations. In a project to translate emergency response material into Aboriginal languages in Western Australia, a range of issues was identified, including the relevance of and acceptance of the materials by the aboriginal communities (32). A similar analysis has not been undertaken for the Caribbean region, but observations made during the Australian project may be applicable. These include:

- Cultural and linguistic diversity among indigenous peoples;
- Varying levels of literacy in a country’s official language in indigenous communities;
- Complexity of government emergency management policy and arrangements;

**Box 9.9 Recommendations for working with indigenous communities in disaster settings** (33)

- Improve access to and the quality and appropriateness of all health services (including mental health services) provided to indigenous peoples.
- Engage indigenous communities and leaders across this region in a meaningful way, in the development health and mental health services.
- Address basic social, cultural, and economic realities within health frameworks.
- Provide funding for community capacity building of indigenous peoples (education/training).
- Recruit, train and employ indigenous peoples as health care providers in their communities.
- Ensure that indigenous communities have equal access to appropriate post-disaster mental health interventions.
Inadequate level of indigenous community knowledge about the respective roles of key emergency management agencies;

Fragmented engagement between emergency service organizations, local governments, and indigenous communities;

Need for greater clarity around roles and responsibilities in regard to remote indigenous communities;

Perceived relevance of emergency management to indigenous communities;

Cultural competency, sensitivity, and relevance of specific emergency procedures.

Indigenous peoples are entitled to the same post-disaster considerations that other citizens receive. One of the most important considerations is to include representatives from indigenous communities in the development of and planning for post-disaster mental health services. Additionally, high-quality research into best practices to meet the needs of these communities must be developed and conducted.

**People living in shelters**

The provision of shelter is frequently the only way to provide temporary accommodation to people who—as a consequence of the disaster—have lost their homes or place of residence. Providing shelter should last for a short period of time, and general principles should be taken into consideration to avoid mental health and psychosocial problems that arise as a consequence of what is intended to be a short-term solution. Unfortunately, it is not uncommon to find that problems related to alcohol abuse, violence, and sexual harassment become worse in temporary shelter situations.
Conclusions

The Caribbean faces a number of significant challenges in the development of evidence-based post-disaster mental health interventions for vulnerable people. The diversity in social, economic, and cultural domains across the region makes it unlikely to find ‘one-size-fits-all’ solutions to complex post-disaster problems. Thus, while interventions based on current best knowledge are being applied, it is essential that evaluation and research on outcomes be conducted to determine what is needed and how it can most successfully (including cost-effectiveness) be delivered to meet the needs of vulnerable people.

References


