A woman with a black hat and a vibrant, multi-colored floral patterned shirt is the central focus. She is smiling slightly and looking towards the camera. The background is a blurred outdoor market scene with yellow and green umbrellas and other people.

Mental Health and Psychosocial Support in Disaster Situations in the Caribbean

Core Knowledge for
Emergency Preparedness
and Response



**Pan American
Health
Organization**

Regional Office of the
World Health Organization



Mental Health and Psychosocial Support in Disaster Situations in the Caribbean

Core Knowledge for Emergency Preparedness and Response

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and the
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Cover photo: PAHO/WHO

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The last decade has been marked by major disasters around the globe. Regardless of their origin, these events have deeply impacted the population living in the affected areas. The loss of life, serious injuries, destroyed homes and other property, displacement, and family separation creates serious disruptions and repercussions in people's lives, and can affect their mental health and psychosocial well being. With time, most of those affected will manage to recover on their own, depending on the circumstances. Some, however, will need more attention, care, and treatment.

This book offers the basic knowledge required for health and mental health workers in the area of mental health and psychosocial support for populations affected by disasters.

There is a close relationship between mental health and physical health, especially in an emergency context. In addition to saving lives and treating physical injuries, it becomes very important to have a good understanding of the mental health reactions of populations to collective trauma. Providing clear information, helping to trace relatives, and listening carefully to expressed needs are actions that, when offered in a timely and appropriate way, will ensure that most of the affected population will react without developing mental disorders. Every country in our Region should have skilled professionals to provide this psychological first aid as well as specialized treatment for those in need.

The importance of having an adequate mental health system prior to an emergency situation becomes a national priority for disaster reduction. A decentralized mental health system is the best option for providing the immediate and appropriate response to the needs of the affected population. The capacity of countries and local authorities to mobilize existing resources efficiently and effectively and to organize an adequate mental health response will depend on the strength of their community-based mental health systems, the depth of the integration of mental health into their primary health care, and the existence of adequate policies, plans, and legislation.

Another important aspect to consider is that the emergency or the disaster can be seen as an opportunity to mobilize interest and resources that will contribute to develop and/or strengthen the mental health system of the affected country.

The Caribbean is a region prone to natural disasters, particularly hurricanes, floods, earthquakes, and volcanic eruptions. Over the years, national authorities in its countries and

territories have increasingly taken measures to lessen the severity of those disasters, with an emphasis on mitigating the physical and structural impact. While this is commendable, similar efforts should focus on becoming better prepared in the mental health and psychosocial field to respond to emergencies and disasters.

I would be remiss if I did not emphasize a unique aspect of this book: it has been primarily written by professionals from the Caribbean who, year after year, have provided support to those affected by disasters in their own country or in neighboring countries, and therefore can appreciate what has worked as well as the shortcomings in disaster response. The valuable collaboration of PAHO/WHO Collaborating Centers, who have contributed to the improvement of mental health systems in many Caribbean nations, were also central to the development of this book. Our gratitude for their input goes out to all of them.

The book has been prepared taking into consideration the needs of the Caribbean population and its professionals. It can be useful for health sector institutions as well as for those actors from the social sector or civil society who provide psychosocial support to communities affected by traumatic events. It is our hope that this publication will serve as a practical tool and as a contribution to basic training materials.

Mirta Roses Periago
Director
Pan American Health Organization

Acknowledgments

This book is the result of a long process involving many mental health and disaster experts who served in different capacities and at different stages of its production. Special thanks go to authors of the chapters and to the professionals who participated in the two workshops held to define the contents and structure of the book.

Representatives from the following countries and territories attended the workshops: Bahamas, Barbados, Belize, Cuba, Grenada, Guadeloupe, Guyana, Jamaica, Montserrat, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago. Their participation was facilitated and supported by their respective Ministries of Health and PAHO/WHO country representations.

Specialists from the PAHO/WHO Collaborating Centers in Canada (Dalhousie University in Halifax and McGill University in Montreal) have contributed throughout the entire process, actively participating in the workshops as well as writing portions of the book.

Gratitude and recognition go as well to different WHO and PAHO/WHO programs and individuals for their support and technical contributions to this manual, including:

- ◆ The PAHO/WHO Area on Emergency Preparedness and Disaster Relief, in particular, Ms. Nicole Wynter, Dr. Dana Van Alphen, Ms. Mónica Zaccarelli Davoli, Dr. Robert Lee, and Dr. Enric Freixa;
- ◆ The PAHO/WHO Regional Mental Health Program in Washington, D.C., in particular, Dr. Dévora Kestel, who served as technical editor, and Dr. Jorge Rodríguez;
- ◆ The WHO Department of Mental Health and Substance Dependence in Geneva, in particular, Dr. Mark Van Ommeren.

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SECTION 1
Introduction and Background Information

Chapter 1

Introduction

Dévara Kestel¹
Mônica Zaccarelli Davoli²

Most lives, injury, displacement, and damage to property resulting from disasters present major challenges for individuals and society at large. These events disrupt and place additional burdens on public and private institutions that provide services. The ability of individuals to cope in the aftermath of a disaster depends largely on their resources and capacities. Problems that an individual faced prior to a disaster, whether psychological or social in nature, can be exacerbated by the chaos following an event.

This chapter addresses the nature of psychological or social problems in the aftermath of disasters and gives an overview of support mechanisms for dealing with these challenges.

Impact of disasters on the health sector

Disasters resulting from natural and manmade hazards have a twofold impact on health systems: directly, through damage to the infrastructure and health facilities and the consequent interruption of services at a time when they are most needed, and indirectly, by potentially causing an unexpected number of casualties, injuries, and illnesses in affected communities (1).

Caribbean countries are at risk for multiple natural hazards, including seismic activity, hurricanes, and floods, as well as human-caused hazards. The Soufriere Hills volcano in Montserrat is the most active in the region. In 1995, it caused widespread damage, destroying the capital city of Plymouth. The January 2010 earthquake in Haiti was devastating in terms of the number of lives lost, serious injuries, and devastation to housing and infrastructure. In the health sector alone, more than 50 hospitals and health centers collapsed or were left unusable (2).

Hurricanes represent the single most important and recurrent hazard in the region. The direct impact of hurricanes can impede development dramatically. Economic losses from Hurricane Ivan (2004) in Grenada, for example, accounted for more than twice that nation's GDP. The health sector in Saint Lucia was impacted to the tune of EC\$8.3 million by Hurricane Tomas in 2010. A number of hospitals were damaged, particularly Dennery Hospital,

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which accounted for half of the cost of the impact to the health sector when it had to be relocated (3).

Given the proximity of the countries and territories in the Caribbean, it is likely that more than one will be affected by the same hurricane. Due to the small size of the islands, it is equally very possible that an entire country will be affected by any one disaster.

In September 1998, the ten-day journey of Hurricane Georges through the Caribbean left widespread destruction throughout many of the islands. One of the worst affected countries was Saint Kitts and Nevis. The National Disaster Office estimated that 80%–85% of the houses on Saint Kitts were partially or completely destroyed. The Joseph N. France General Hospital in Saint Kitts, a 174-bed facility, and the only hospital on the island serving a population of 33,000, lost 90% of its services.

Mental health and psychosocial support in disasters

In their *Guidelines on Mental Health and Psychosocial Support in Emergency Settings* (4), the U.N. Inter-Agency Standing Committee (IASC) defines mental health as follows: “The composite term mental health and psychosocial support ... describe[s] any type of local or outside support that aims to protect or promote psychosocial well-being and/or prevent or treat mental disorder.” The two terms—mental health and psychosocial support—are highly interconnected, with one or the other having a predominant role during different phases of a disaster.

Significant problems of a predominantly social nature include (5, pg. 2):

- ◆ “Pre-existing (pre-emergency) social problems (e.g., extreme poverty, belonging to a group that is discriminated against or marginalized, and political oppression);
- ◆ “Emergency-induced social problems (e.g., family separation, disruption of social networks, destruction of community structures, resources and trust, increased gender-based violence) or a lack of food and water and shelter;
- ◆ “Humanitarian aid-induced social problems (e.g., undermining of community structures or traditional support mechanisms)”.

Similarly, problems of a predominantly psychological nature include:

- ◆ “Pre-existing problems (e.g., severe mental disorder; alcohol abuse);
- ◆ “Emergency-induced problems (e.g., grief, non-pathological distress, depression, and anxiety disorders, including post-traumatic stress disorder [PTSD]);
- ◆ “Humanitarian aid-related problems (e.g., anxiety due to lack of information about food distribution).”

Thus, mental health and psychosocial problems in emergencies encompass far more than the experience of PTSD or disaster-induced depression. A selective focus on these two problems is inappropriate because it overlooks many other mental health and psychosocial problems in emergencies and ignores people’s traditional resources and support systems.

It is important to note that not all of the population affected by a disaster will encounter psychological problems. In general terms, a study carried out by WHO (6) shows that in emergency situations, there is an increase, on average, of 1% of people with severe mental disorders (e.g., psychosis and severely disabling presentations of mood and anxiety disorders) above an estimated baseline of 2%–3%. Additionally, there is an increase of 5%–10% of people with mild or moderate mental disorders (including mood and anxiety disorders, such as post-traumatic stress disorder) above an estimated baseline of 10%. Most of the persons in this second category will recover naturally, over time. Although these figures are estimates based on available studies, they do offer an idea of what might be expected in a population affected by a disaster.

Coordination of mental health services and psychosocial support

In normal circumstances, providing mental health services and psychosocial support implies working with the health sector as well as other sectors: social, education, justice, and civil society, among others. These sectors play an important role in the direct provision of services, as well as in the development of mental knowledge and tools.

In large-scale emergencies, health sector agencies directly involved in mental health and psychosocial support are limited and in many countries, most of the psychosocial support activities may be conducted by agencies outside the health sector. Therefore, coordination among all the actors/agencies involved becomes a priority. This is particularly relevant in major natural disasters or complex emergencies, where the number of national and international organizations may be very high.

As part of the Humanitarian Reform of the United Nations, in 2005 the Inter-Agency Standing Committee developed a new approach – the cluster approach – as a way of organizing coordination and cooperation among humanitarian actors into sectors. The cluster mechanism was adopted to improve the efficiency and effectiveness of humanitarian response in crisis; to increase predictability and accountability in all main sectors of the international humanitarian response; to ensure that gaps in response do not go unaddressed (7). As stated in the IASC guidelines, while a specific cluster is not assigned to mental health and psychosocial support, the following clusters may be relevant to work in this area: Camp Coordination and Camp Management; Early Recovery; Education; Emergency Shelter; Health; Nutrition; Protection; and Water, Hygiene and Sanitation.

Box 1.1 presents a summary of the recommendations for coordination of mental health and psychosocial support (MHPSS).



Box 1.1

IASC Guidelines for coordination of MHPSS activities in major disasters (3, pg. 10)

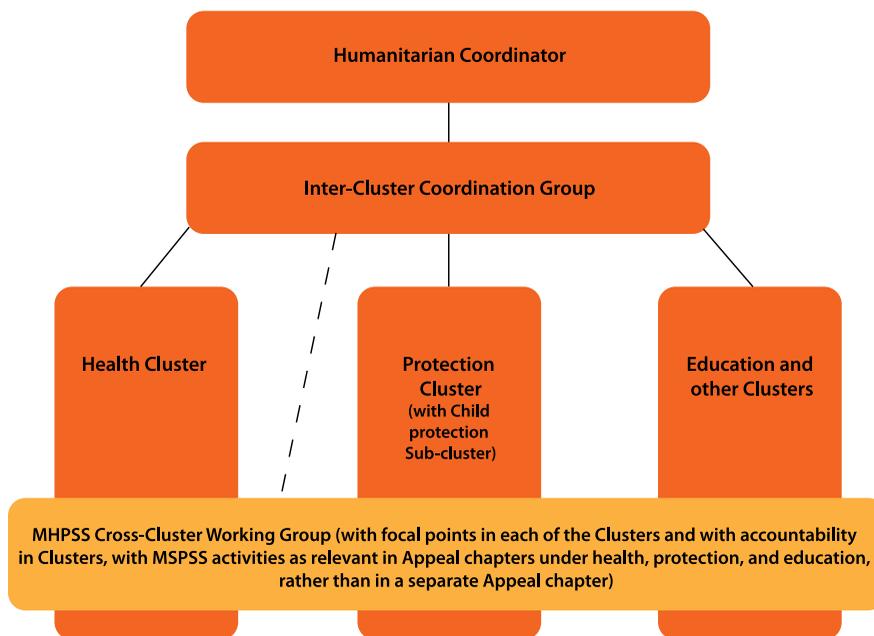
“MHPSS involves activities that need to be discussed and integrated within relevant cluster/sector work plans, as they are core components of core clusters/sectors (e.g. Health, Protection and Education). Accountability for MHPSS activities lies within the relevant Clusters. It is important to include MHPSS projects in relevant chapters (Health, Protection and Education) of Flash or CAP Appeal documents. Such documents should not have a separate MHPSS chapter. MHPSS should not be established as a separate Cluster.

“The IASC Guidelines recommend establishing a single, intersectoral MHPSS coordination group, with terms of references, and in which many MHPSS actors are present. Key inter-cluster operational issues should be addressed by the Inter-Cluster Coordination Group, where it exists. When few MHPSS actors are present, an intersectoral MHPSS coordination group may not be appropriate. In that case, it is important to organize regular meetings among MHPSS actors from different sectors or to establish a system of MHPSS focal points from within the various relevant clusters/sectors, who meet regularly.

“The MHPSS coordination group should work with all relevant clusters/sectors to ensure that their activities are conducted in a way that promotes mental health and psychosocial well being.”

In large-scale or complex emergencies when the inter-cluster coordination mechanism is activated, the model shown in Figure 1.1 is suggested. According to this model, MHPSS should have focal points in each cluster involved that provides MHPSS to report and provide feedback to and from specialized sectors and MHPSS.

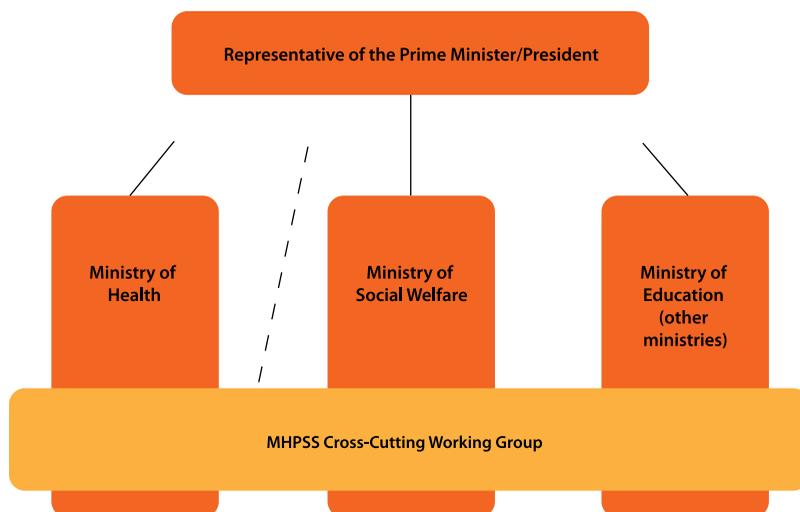
Figure 1.1. Model for coordinating MHPSS in large-scale disasters



Source: Adapted with permission from IASC Reference Group for Mental Health and Psychosocial Support in Emergency Settings. Mental Health and Psychosocial Support in Humanitarian Emergencies: What Should Humanitarian Health Actors Know? Geneva, IASC, 2010 (5).

Most disasters in the Caribbean are not considered complex emergencies. However, although fewer actors may be involved, the need for coordination is extremely important. In most countries the ministry of health leads the mental health and psychosocial coordination efforts, involving actors from other ministries (social, education, local government) as well as non-governmental agencies (see Figure 1.2).

Figure 1.2. Model for coordinating MHPSS in smaller scale disasters



Disasters are an opportunity to develop or strengthen mental health systems

Disasters often present windows of opportunity, and in these situations, the attention and support that a country receives can help to develop and/or strengthen existing mental health systems. In order to improve the effectiveness and sustainability of activities, it is important to have a medium- to long-term vision when planning and implementing interventions.

The *IASC Guidelines for Mental Health and Psychosocial Support in Emergency Settings* (5, pp. 22-29) offer a detailed list of initiatives that should take place as part of the post-emergency recovery process. The following initiatives are recommended for the health sector:

- ◆ Initiate updating of national mental health policy and legislation, as appropriate.
- ◆ Make mental health care available to a broad range of emergency-related and pre-existing mental disorders through general health care and community-based mental health services.
- ◆ Work to ensure the sustainability of any newly established mental health services.
- ◆ For people in psychiatric institutions, facilitate community-based care and appropriate alternative living arrangements” (5, pg. 17).

Examples exist in which the initiatives aimed at consolidating or strengthening a mental health system, were an outgrowth of activities initiated in the response to a disaster. As described in IASC Guidelines for Humanitarian Actors: “Reports from Albania, China, Indonesia, Jordan, Iraq, Kosovo, Macedonia, the occupied Palestinian territory, Peru, Sri Lanka and Timor-Leste show how an emergency can lead to the long-term development of sustainable mental health care.” The aftermath of the earthquake in Haiti, and the cholera outbreak later in 2010, also demonstrate how the post-disaster period can be right time to plan for change in existing systems. As pointed out by Z. Abaakouk (see Box 1.2), shortly after the earthquake, “the Ministry of Health and key stakeholders discussed the future model of mental health for Haiti. The intention was to use the expertise and funds present in the aftermath of the disaster to build a sustainable mental health system that will remain once international actors leave the country.”

Key interventions that can help to establish or strengthen a sustainable mental health system should be taken into account, starting in the immediate post-disaster phase:

- ◆ Development or updating of the mental health policy and plan to ensure a long-term vision of strengthening the mental health system in the country. While a post-emergency response to mental health and psychosocial needs is being offered, representatives from international organizations that intend to provide support to the country for longer periods of time should meet with officials from the ministry of health and a group of national stakeholders for the elaboration or revision of the policy and plan that considers a human rights perspective.
- ◆ Development of community-based mental health services to include psychiatric units in general hospitals and designating health facilities to be used for community-based mental health day services that would be built or renovated as part of the reconstruction process. It is important to avoid the concentration of efforts and resources (financial and human) for a country’s mental health system in tertiary level institutions (psychiatric hospitals being the most common).
- ◆ Training community-based mental health professionals is particularly relevant in cases where the only or the most significant service has been a psychiatric institution. Professionals that provide mental health and psychosocial support will need updated training and development of skills to facilitate their work in community settings.
- ◆ Ensure inclusion of a mental health component in training programs for primary health care practitioners as part of large training programs being implemented.

Caribbean mental health systems

Between 2006 and 2009, 16 Caribbean countries and territories implemented the World Health Organization Assessment Instrument for Mental Health Systems (WHO-AIMS). For the first time, this comprehensive assessment offered the possibility to gather detailed information about how each country or territory is organized, which resources are involved, and what are the strengths and weaknesses of their respective mental health systems.

Each country or territory has produced a report presenting results from the assessment. These reports, which are available for consultation (8), offer a unique resource that humanitarian actors could use at the time of an emergency to gain knowledge on existing facilities and resources, their distribution, and modalities of functioning. A report reviewing the situation of the 16 Caribbean countries and territories (9) is available as well for consultation. MHPSS disaster managers are encouraged to have a copy of this report readily available in their 'kit' of disaster preparedness material.

To briefly summarize these findings, it can be said that Caribbean countries and territories are undergoing continual change, moving from a centralized system—in general led by a psychiatric hospital—to a decentralized system, which offers community-based mental health service. In many cases, mental health is being integrated into primary health care and psychiatric nurses are playing a significant role in providing services.

However, despite the advances, the decentralization process must continue, particularly considering the limited number of mental health human resources that are available in most countries. Updating mental health policies, plans, and legislation is crucial for the development of a sustainable system.



Following is a brief summary of the mental health system in Haiti, in the context of the catastrophic earthquake of January 2010. The complete text can be accessed through the link at the end of the box.

Box 1.2

Brief summary of mental health in Haiti in 2010: a public health need, an added value within the health sector, and a cornerstone for reconstruction

Zohra Abaakouk, PAHO/WHO Mental Health Advisor, Haiti

Haiti's existing institutional model of mental health care is poorly developed. There are no regulations and/or legislation related to mental health issues, nor does the country have a national mental health policy and plan.

- Public mental health services are restricted to the tertiary care level, centralized and concentrated in two main facilities
- Mental health services have not been integrated into the public health system. Instead, all ambulatory mental health services as well as community-based services rely on national and international nongovernmental organizations (NGOs).
- Within the public system, the resources (human and material) are very limited. According to the Ministry of Health, the budget allocated to mental health services amounts to 1% of the public health sector budget.

Mental health and psychosocial interventions: the situation in 2010

Following the 2010 earthquake in Haiti, mental health needs were overwhelming and the Ministry of Health was not able to respond to this important demand. Immediately after the earthquake, the Cross-Cluster Working Group on Mental Health and Psychosocial Support (MHPPS) was created, as it was estimated that at one point more than 110 different organizations were providing mental health and/or psychosocial services, or conducting training to health and mental health professionals (5).

MHPPS activities during response to the cholera outbreak

The mental health component of the cholera outbreak was not taken into consideration by national authorities and major NGOs, underestimating the importance of a comprehensive public health approach. Due to lack of information and knowledge about cholera, the first reaction of the population was based on fear and hostility (see Box 3.2 on "Experiencing fear during an infectious disease outbreak" in Chapter 3). Interventions by the Ministry of Health played a crucial role in building a bridge between health units and communities, managing fear, and fighting stigmatization of patients, their relatives, communities, and health workers. Through psychosocial group activities it has been possible to gain better clarity about common Haitian representations and perceptions related to cholera (6, 7, and 8).

Mental health issues as part of the Haitian reconstruction process

One of the first priorities of this cooperation was to conduct an assessment of the existing mental health system through the World Health Organization Assessment Instrument for Mental Health Systems (WHO-AIMS) (9). Another priority has been to strengthen existing mental health care services, an area widely excluded from the social perspective. A big effort is being made to support the psychiatric hospitals where living conditions remain poor, there is a shortage of human resources and key supplies, and basic psychosocial needs as well as training needs are still unaddressed.

A draft national mental health policy has been produced to decentralize resources, incorporate mental health services into primary health care and general hospitals, and train primary health care workers on mental health issues.

Click here or go to <http://tinyurl.com/89ud2nd> to read the full article of the mental health system in Haiti, prior to and in the aftermath of the earthquake, which includes links to important references.

References*

1. Pan American Health Organization. *Guidelines for vulnerability reduction in the design of new health facilities*. Washington, D.C.: PAHO, 2004. <http://tinyurl.com/6pvlfxa>.
2. Economic Commission for Latin America and the Caribbean. *Macro socio-economic and environmental assessment of the damage and losses caused by Hurricane Tomas: a geo-environmental disaster*. Santiago: ECLAC, February 2011. <http://tinyurl.com/7wz8m4h>.
3. Inter-Agency Standing Committee (IASC). *IASC guidelines on mental health and psychosocial support in emergency settings*. Geneva: IASC, 2007. <http://tinyurl.com/r2mh4f>.
4. Inter-Agency Standing Committee (IASC). *IASC guidelines on mental health and psychosocial support in humanitarian emergencies: What should humanitarian health actors know?* Geneva: IASC, 2010. <http://tinyurl.com/2uft5hm>.
5. World Health Organization. *Mental health assistance to the populations affected by the tsunami in Asia*. [Internet] 2005 [cited 1 June 2010] Available from: <http://tinyurl.com/7fkc589>.
6. World Health Organization. *Assessment Instrument for Mental Health Systems (AIMS) country reports*. Available from: http://www.who.int/mental_health/who_aims_country_reports/en/index.html.
7. World Health Organization. *Assessment Instrument for Mental Health Systems (AIMS) report on mental health systems in the Caribbean Region*. Available from: http://www.who.int/mental_health/evidence/WHO-AIMS/en/index.html.

* **Please note** that in some cases, the original web address (URL) of these references has been adapted to make it easier for you to access the information. When you use these shortened URLs in your browser, you will be automatically directed to the resources on the each organization's website. If you are reading this chapter online, you can click on the link. If you have downloaded the chapter or are reading a printed copy, you can cut and paste the shortened URL into your browser.

Disaster Management Structures in the Caribbean

Mônica Zaccarelli Davoli³

Introduction

This chapter provides a brief overview of the structures and mechanisms in place for disaster management, risk reduction and response in the Caribbean.

There is no one-size-fits-all approach to disaster management among Caribbean countries, and indeed, the same is true for regional and international agencies and mechanisms. Often a disaster-affected country will become highly sensitized to the need to improve its management capacity. However, maintaining this momentum over long periods of time remains a challenge. The number of actors participating in response operations has also changed considerably over the last decades, presenting a further challenge, and civil society groups have significantly increased their presence in these operations. This text will focus on the main structures linked to the nation states in the Caribbean.

This chapter begins by presenting an overview of national disaster response structures in Caribbean countries and territories, followed by regional/Caribbean organizations, and ending with the international mechanisms. It is important to recognize that the first response is always at the local/national level and that any response must support, rather than compete with the national response.

National disaster response structures

In general, Caribbean countries have similar structures. That is, the Head of Government has ultimate responsibility for disaster management. To support this mandate, he/she relies on both operational and policy structures.

The operational structures are the national disaster management offices. In Saint Kitts and Nevis, for example, this office is called the National Emergency Management Agency (NEMA); in the British Virgin Islands, it is the Department of Disaster Management (DDM); in Jamaica, the Office of Disaster Preparedness and Emergency Management, (ODPEM), etc. Although the structures are similar among the countries, the size and scope of national offices vary widely.

3. Disaster Reduction Advisor, Pan American Health Organization.

The functions of the disaster management offices include, but are not limited to:

- ◆ Implementing government policy and programs aimed at lessening the impact of disasters;
- ◆ Providing training in disaster management;
- ◆ Issuing early warning of hazards to institutions and the general population;
- ◆ Calling for activation and/or deactivation of the National Emergency Response Plan;
- ◆ Leading disaster response efforts and coordinating with other sectors and with regional and international structures.

The mechanisms that set policy are the National Disaster Committee or Council, typically a multi-agency, multi-sectoral body, which includes the private sector and non-governmental and voluntary organizations. Using the National Disaster Committee of Barbados as an example, some of its members are: the Director of Emergency Services, Director of Statistical Services, Commission of Police, Chief Medical Officer, Chief Welfare Officer, Airport Manager, Barbados Red Cross, and others.

Although the responsibilities of the National Disaster Committees vary from country to country, they serve primarily as a forum for identification of hazards and definition of policy strategies to prevent and mitigate damages and to make preparedness, response, and rehabilitation determinations.

The health disaster coordinator or the representative of the health sector in the National Disaster Committee is the bridge between the national body and a health sector sub-committee. This health-specific forum is where health sector coordination takes place. Often the main players include health services or hospitals and primary health care facilities, epidemiology departments or units, environmental health officers, and others. Four of the functions of a health sub-committee are essential for an efficient disaster response. They are to:

- ◆ Develop a health sector disaster preparedness and response plan;
- ◆ Train health sector personnel about the plan;
- ◆ Develop simulation exercises that constantly rehearse and test the plan;
- ◆ Estimate and attend to the health needs in disaster response situations.

In the health sector, in addition to the national health disaster preparedness and response plans, there are specific contingency plans for different threats or areas, e.g., SARS response plan, pandemic influenza response plan, health services response plan, etc. It is in this context where mental health and psychosocial concerns and potential needs must be addressed.

Disaster response structures at the regional level in the Caribbean

External assistance is needed in cases in which the event overwhelms the national capacity such as the floods in Guyana (2005) and Suriname (2006) or occasions where the event has international proportions (for example, Hurricane Ivan in Grenada in 2004 and the Haiti earthquake in 2010, which affected the entire country).

In 1991, Caribbean countries jointly created the Caribbean Disaster and Emergency Response Agency (CDERA) through an Agreement of the Conference of Heads of Government of CARICOM as a regional agency for disaster response, CDERA's mandate evolved to other aspects of disaster management. To reflect this change, it was renamed the Caribbean Disaster Emergency Management Agency (CDEMA) (1) in 2010. Presently there are 18 Participating States within CDEMA's membership (1).

CDEMA uses the following guidelines to implement its response mandate:

- ◆ Carry out immediate and coordinated response to disasters in Participating States;
- ◆ Mobilize and coordinate disaster relief from governmental and nongovernmental organizations for the affected Participating States;
- ◆ Promote the establishment, enhancement, and maintenance of disaster response capabilities among Participating States.

The CDEMA Coordinating Unit executes the Regional Response Mechanism (RRM) (note that "regional" here refers to Caribbean and more precisely CDEMA Member Countries) on behalf of the CDEMA Participating States. The RRM is an arrangement for the coordination of disaster response among CDEMA Participating States, regional and international agencies. The RRM is:

- ◆ A number of plans, procedures and guidelines;
- ◆ A group of response units, agencies and organizations;
- ◆ A collection of agreements, memoranda of understanding and protocols.

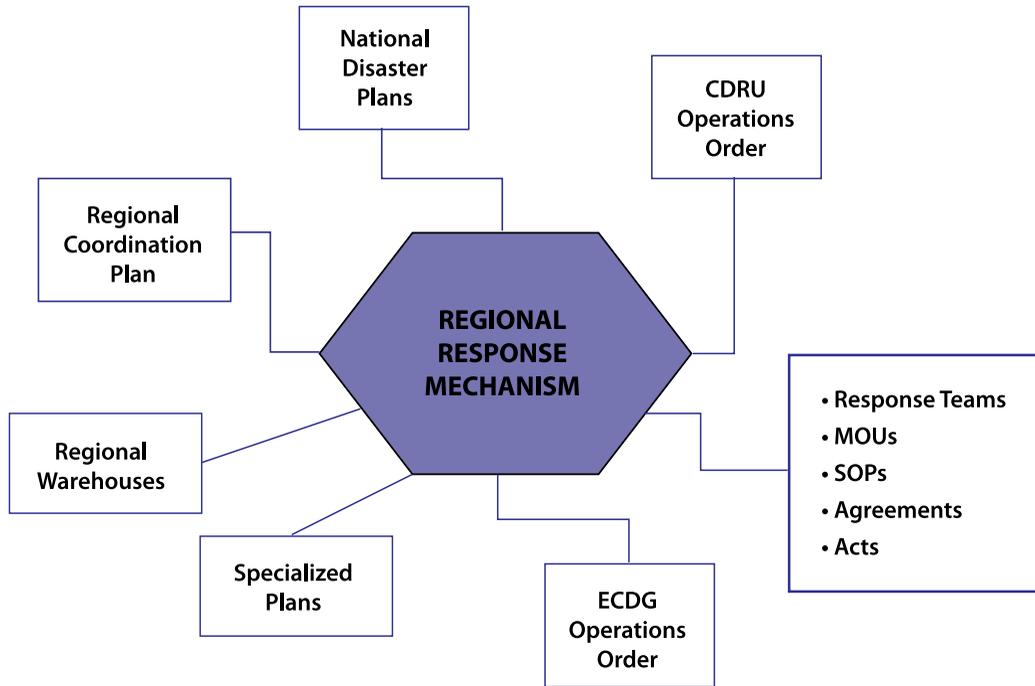
The Regional Response Mechanism is composed of a regional coordination plan, regional warehouses, memoranda of understanding, standard operating procedures, and other elements mentioned in Figure 2.1.

One of the key components of the RRM is the Caribbean Disaster Relief Unit (CDRU), a facility created to manage the use and secure the participation of regional forces in humanitarian situation. The Regional Security System/Central Liaison Office in Barbados manages the CDRU on behalf of CDEMA, as it is staffed by military and police personnel. The CDRU is available to any CDEMA Participating State to support response and relief operations following a disaster impact. The main tasks of the CDRU include management of relief supplies, emergency telecommunications support, and identifying appropriate personnel for repairing critical lifeline facilities. CDRU organizes training sessions (2) to support these activities.

Another key component is the Rapid Needs Assessment Team (3). Commonly referred to as RNAT, this team, comprised of experts in different aspects of disaster response, is deployed within the first two to three days after the impact of the hazard and is responsible for the initial damage report and assessment of humanitarian needs. PAHO/WHO participates in the team by providing an expert in the health sector.

A coordination mechanism is in place to facilitate coordination within the Eastern Caribbean countries and territories. The Eastern Caribbean Donor Group (ECDG) combines

Figure 2.1 Components of the Regional Response Mechanism



international and regional (Caribbean) institutions. The group is convened and chaired by the Resident Coordinator of the United Nations in Barbados with participation of CDEMA, the Regional Security System, different United Nations agencies involved in disaster response, embassy representatives and/or bilateral cooperation agencies (for example, United Kingdom Department for International Development [DFID], Canadian International Development Agency [CIDA], U.S. Agency for International Development [USAID], international development banks such as the Inter-American Development Bank and the Caribbean Development Bank). A similar mechanism is in place for the Western Caribbean functioning from Jamaica.

The Regional Response Mechanism is activated in full or specific components, according to the magnitude of the event. A request from the affected country is usually the requirement for its activation.

Specifically in support to the health sector of disaster-affected countries, the Pan American Health Organization (4), the World Health Organization's office for the Americas, has maintained an Emergency Preparedness and Disaster Relief program for over three decades. PAHO/WHO works with countries to:

- ◆ Mobilize the Regional Health Disaster Response Team;
- ◆ Strengthen the channeling of health information for analysis and decision making, providing a coordination platform for humanitarian response actors, promoting communication, and generating up-to-the-minute reports;

- ◆ Lead the UN Health Cluster at the country level;
- ◆ Maintain health standards and ensure access to health services in complex emergencies;
- ◆ Coordinate international assistance and ensure that humanitarian supplies and donations are managed transparently and effectively.

PAHO/WHO's Regional Disaster Response (RRT) Team (5) comprises public health experts in health services, epidemiology, water and sanitation, mental health, information and communication, and other areas. Team members represent PAHO/WHO, ministries of health, and academic institutions. At the request of the ministry of health, the Team is available to provide support in authoritative diagnosis of health needs for external assistance, provide technical advice on post-disaster health issues, establish an emergency operations center, and work with national authorities to coordinate the overall health response. The mobilization is triggered by a request from ministries of health to PAHO/WHO. More information about the RRT Team, its deployment and tools can be found in the Field Manual on PAHO's website.

Mental health is one of the areas in which countries request support in a post-disaster setting. In response to that request, mental health professionals participate with the RRT team on specific tasks: assessing the impact of the disaster and population needs from the mental health and psychosocial perspective, and providing advice and working with national counterparts in developing the most appropriate interventions.

International disaster response structures

By “international structures” we mean the mechanisms countries have put into place under the scope of the United Nations to support nations that have been impacted by disasters. As mentioned in Chapter 1, the most recent humanitarian reform (6) aims to enhance humanitarian response capacity, predictability, accountability, and partnership. It is an effort by the international humanitarian community to reach more beneficiaries, with more comprehensive, needs-based relief and protection, in a more effective and timely manner.

The U.N. Cluster Mechanism has changed the way in which humanitarian assistance is coordinated and delivered. Assistance is now organized around nine clusters. Each Cluster is led or co-led by a UN agency, according to its respective areas of expertise and is responsible for all post-disaster activities related to the topic,



regardless of who is implementing – whether the government, an NGO or a UN agency. The Clusters encompass the following issues (7):

AREA OF RESPONSIBILITY	LEAD AGENCY (IES)
Agriculture	Food and Agriculture Organization (FAO)
Camp Coordination/Management	UN Refugee Agency (UNHCR)
Early Recovery	UN Development Program (UNDP)
Education	UNICEF, Save the Children
Emergency Shelter	IOM, UNHCR
Emergency Telecommunications	Office for the Coordination of Humanitarian Affairs (OCHA), World Food Program WFP)
Health	World Health Organization (in the Americas, Pan American Health Organization)
Logistics	WFP
Nutrition	UNICEF
Protection	UNHCR
Water, Sanitation, Hygiene	UNICEF

As cluster leads, agencies work with relevant humanitarian actors that have expertise and capacity in a specific area. In a country facing an emergency situation or a disaster, the clusters provide support to the Humanitarian Coordinator. They do not necessarily carry out all of the activities themselves, but are responsible for ensuring that they are implemented. In this sense, if all else fails, the lead agency must step in to do the job itself. The concept of ‘provider of last resort’ is the bottom line in accountability. However, the financial implications of this responsibility for cluster lead agencies require further examination and clarification. Read more about the concept of provider of last resort and how the Cluster approach is used to strengthen humanitarian response (8).

The Global Health Cluster, under the leadership of the World Health Organization, is made up of more than 30 international humanitarian health organizations that have been working together to build partnerships and mutual understanding and to develop common approaches to humanitarian health action. The Global Health Cluster is charged with the following:

- ◆ Producing widely endorsed products and services that will streamline emergency response and increase its predictability;
- ◆ Achieving greater coherence in health action among the many and varied stakeholders by building partnership and common understanding;
- ◆ Well managed health information, integrated into an overall information management system that will serve all stakeholders to ensure an evidence-based health response;

- ◆ Coordinating a system to rapidly deploy health cluster coordinators, other experts and medical supplies for a more effective and timely response
- ◆ Ensuring a greater focus on building national level capacity to strengthen the preparedness, response and resilience of affected countries.

Review the Global Health Cluster's strategic framework for 2009-2011. Read more considerations for countries in Latin America and the Caribbean (9).

References

1. Caribbean Disaster Management Emergency Agency (CDEMA). <http://cdema.org/>.
2. Caribbean Disaster Emergency Management Agency (CDEMA). *Training for Caribbean disaster relief personnel* [Internet]. [Cited 26 October 2010]. Available from: <http://tinyurl.com/7ezld5e>.
3. Caribbean Disaster Management Emergency Agency (CDEMA). *An overview of the Caribbean Regional Response Mechanism* [Internet]. [Cited 26 October 2010]. Available from: <http://tinyurl.com/7ol7gb6>.
4. Pan American Health Organization (PAHO/WHO), Area on Emergency Preparedness and Disaster Relief. [Internet]. [Cited 26 October 2010]. Available from: <http://www.paho.org/disasters>.
5. Pan American Health Organization (PAHO/WHO), Area on Emergency Preparedness and Disaster Relief. [Internet]. [Cited 26 October 2010]. Available from: <http://tinyurl.com/7p7omu9>.
6. United Nations Office for the Coordination of Humanitarian Affairs (UN/OCHA). *Humanitarian Reform Agenda (OCHA)* [Internet]. [Cited 29 September 2010]. Available from: <http://tinyurl.com/cp4ndd6>.
7. *One Response, The Global Cluster Leads* [Internet]. [Cited 26 October]. Available from: <http://tinyurl.com/6lttgsr>.
8. Inter-Agency Standing Committee (IASC), *Guidance note on using the Cluster Approach to strengthen humanitarian response*. [Internet]. [Cited 24 November 2006]. Available from: <http://tinyurl.com/6qrrgz4>.
9. *Cluster Approach Implementation by Country* [Internet]. [Cited 26 October 2010]. Available from: <http://tinyurl.com/6vwwg6y>.

Mental Health and Psychosocial Support Plan for Emergencies

Dévora Kestel⁴Jorge Tomás Balseiro Estévez⁵Jorge Rodríguez⁶

Why a mental health plan for emergencies?

The importance of addressing mental health and psychosocial issues in disaster situations has become increasingly relevant for governments and humanitarian actors. According to local circumstances, mental health professionals are frequently called upon after an emergency to provide immediate psychosocial support to the victims of an event. This happens after a relatively minor incident, such as a car accident with multiple fatalities, as well as in cases where the disaster is major, as in the case of the 2010 earthquake in Haiti.

Whatever the magnitude of the disaster or emergency, there is increasing awareness of the need to be ready for such events. This is particularly relevant in a region such as the Caribbean, where the risk of hurricanes, earthquakes, and flooding is relatively high.

A mental health component should be part of the national health sector plan for emergencies, which forms part of the national emergency plan. At the same time, mental health plans for emergencies, where they exist, need to be made part of the national mental health plan in order to ensure cohesiveness between the emergency plan and the country's mental health system. An example of one country's integration of mental health care into their disaster planning is provided in Box 3.1.



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Box 3.1**Cuba's experience in the protection of mental health in disaster situations**

Jorge T. Balseiro Estévez⁷

Particularly over the last 20 years, Cuba has developed methodologies and guidelines for mental health care in disaster and emergency situations, which are the country's foundation for planning and action. This process was conducted systematically in all provinces and included the participation of mental health specialists, health workers, and authorities from the National Health System (NHS). Workers from local government and organizations, including the National Civil Defense, first responders and volunteers, were involved in the design and implementation of these methodologies.

In each province, training is carried out by mental health specialists and experts from different organizations such as Ministry of Health and Professional Associations (psychiatry and psychology), under the general supervision and coordination of the Technical Committee of the Latin American Center of Disaster Medicine (CLAMED). The Cuban Ministry of Public Health designated CLAMED as the organization responsible for training and preparing health service personnel for emergency situations and disasters. CLAMED has organized and developed postgraduate courses, training workshops, group discussions, and other approaches to exchange knowledge, experience, and lessons learned in disaster management at local, national and international levels.

In 2008, the Cuban Ministry of Public Health formulated and adopted the Guidelines for Mental Health in Disasters in Cuba. This document provides guidance about general actions to be implemented during each stage of a disaster: prevention, preparedness, response and recovery.

Cuba has trained and prepared a significant number of professionals who have assisted victims of catastrophe in several countries of Latin America, the Caribbean, and other continents, through the Henry Reeve International Brigade.

7. Professor of Psychiatry and Disaster Chairperson, University of Medical Sciences, Camaguey; Director of Psychiatry Hospital of Camaguey, Cuba.

The IASC Guidelines (1, pp. 23–24) introduce a Matrix of Interventions to guide basic actions that should be considered in an emergency context to protect and promote mental health and psychosocial support for affected populations. A summary of the areas introduced by the matrix is presented in Table 3.1. For each one of the areas listed, the matrix proposes actions that should take place during emergency preparedness, as a minimum response, and as a comprehensive response. The complete matrix is available online through the link under Reference 1.

Table 3.1 Matrix of interventions in MHPSS in emergency settings

Part A—Common function across domains

- Coordination
- Assessment, monitoring and evaluation
- Protection and human rights standards
- Human resources

Part B—Core mental health and psychosocial support domains

- Community mobilization and support
- Health services
- Education
- Dissemination of information

Part C—Social considerations in sectoral domains

Food security and nutrition
Shelter and site planning
Water and sanitation

Action plan for mental health care and psychosocial support in emergencies

Objective of the plan

The objective of the plan is to introduce and develop the mental health and psychosocial component of health care during emergencies, as well as to offer an appropriate response to the mental and psychosocial needs of the population. Implicit in this central objective are the following goals:

- ◆ To eliminate or reduce the risk of suffering psychosocial injury;
- ◆ To reduce distress among the population;
- ◆ To contribute to prevention and control of the range of social problems arising among the population, especially among those most affected;
- ◆ To prevent, treat, and rehabilitate the mental disorders occurring as a direct or indirect consequence of the disaster or emergency;
- ◆ To provide support and psychosocial care for the members of the response teams;
- ◆ To ensure the psychosocial recovery of the population affected by the disaster after the acute phase.

Principles of the plan

- ◆ Interdisciplinary and multi-sector strategy;
- ◆ Social participation;
- ◆ Comprehensive approach to health, focusing on primary health care;
- ◆ An approach based on: a) vulnerability and risk; b) human rights; c) consideration of ethnic, linguistic, and cultural characteristics; d) gender equity;
- ◆ Flexibility and adjustment to local circumstances.

General recommendations for action (2, 3)

- ◆ The paradigm of mental health care in emergencies should be modified, giving special emphasis to groups and communities. The most frequent institutional responses have been based on individual psychiatric care, which is not effective in emergency situations and can serve only a limited number of people.
- ◆ After a major disaster, it is essential to provide guidance for the insecurity caused by fears of repeated or new disasters.

- ◆ General measures that help to bring about order and calm should be supported.
- ◆ It is important to take into account the values, traditions, and customs of the population, as well as other features in accordance with age, gender, place of residence, etc.
- ◆ The most vulnerable people should receive specific care. Members of the response teams are an at-risk group who should receive priority attention.
- ◆ Humanitarian assistance, the satisfaction of basic needs for the disaster-affected population, and the establishment of safe environments are the primary and crucial measures of first aid and psychosocial assistance.
- ◆ Placing disaster victims in shelters should be considered the option of last resort since it generates many psychosocial problems.
- ◆ The provision of direct assistance in shelters, schools, and other community spaces makes early identification of psychosocial problems possible and allows proactive treatment.
- ◆ Diagnostic labeling should be avoided when dealing with disaster victims.
- ◆ Hospitalization should be limited to only the absolutely necessary cases and for the shortest possible time. Also, the use of medications should be restricted to the bare minimum.
- ◆ Criteria for psychiatric referral should be defined, for example: 1) persistent or aggravated symptoms that do not resolve with initial treatment, or symptoms that cause great suffering; 2) significant difficulties coping with daily life; 3) the risk of complications, especially suicide; 4) related problems, such as alcoholism; and 5) serious psychiatric disorders, such as psychosis (which rarely develop in these conditions).
- ◆ There should be an emphasis on a return to normalcy as soon as possible, avoiding re-victimization of the population.
- ◆ Companionship in the form of groups at significant moments such as during exhumations or in morgues is an approach that complements clinical interventions and administrative measures.
- ◆ Mourning is expressed differently by different cultures. The execution of farewell rites of loved ones is important for accepting and processing what has occurred.
- ◆ It has been demonstrated that there can be medium- to long-term mental health effects of severe disasters.

Before drawing up the plan, it is desirable to (4, 5):

- ◆ Review the country's regulations and legislation; the national disaster response plans in the ministry of health and other institutions of the health sector; and the national mental health plan;
- ◆ Compile existing documentation on mental health and emergencies;
- ◆ Interview key actors at the national and local levels;
- ◆ Set up a multi-sector working group to draw up the plan which includes:

- The government agency responsible for coordinating disaster and emergency response (the agency name differs depending on the country)
- The ministry of public health
- Other government agencies (education, culture, sport, social protection, labor and economic actors)
- Civil defense
- Red Cross
- Military forces
- Police force and other public security agencies
- Mayors' offices and city authorities
- The fire service
- Universities

Suggested components of the plan (1, 3, 4)

The following ten suggested components of the plan are drawn from different materials produced over the years, both at global level (as in the case of the IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings) and at regional level (PAHO publications produced as a result of countries' experiences in disasters).

1. **Prior preparedness actions**

These include planning and organization of the response, training of staff, etc.

2. **Rapid preliminary assessment of damage and mental health needs after a disaster**

Territories and/or countries should conduct a Mental Health Situation Analysis. This will provide a basis for a more efficient rapid assessment that is required in the immediate aftermath of the disaster (see Chapter 4 for more details on conducting mental health assessments in disasters). A tool or guide for rapid assessment in disasters or emergencies should be used at the local and country level and include the following:

- General, social, and demographic assessment of the community;
- Identification of the mental health needs and psychosocial problems faced by the population;
- Evaluation of the mental health services and programs;
- Determination of priorities and target groups for immediate action.

3. **Psychological first aid by unspecialized personnel**

Primary health care workers, volunteers, search and rescue personnel, humanitarian aid workers, and community agents are the “first responders” following a disaster and have direct contact with the population. They can provide psychological first aid immediately after a disaster.

4. Specialized care

Specialized care should be reserved for cases with more complex mental disorders. The mental health services should be linked to primary health care. The following features of a country/territory's mental health system should be taken into consideration when planning for specialized care of the disaster-affected population:

- Assessment of specialized human resources and their distribution, the coverage they provide and the existing support network. The mental health resources available for mobilization during emergencies should also be assessed.
- Provision of direct specialized clinical care for persons with mental disorders, implying the organization of the following services:
 - Psychiatric hospital (it is not the favored option);
 - Psychiatric department of a general hospital;
 - Community and ambulatory mental health services;
 - Mobile teams or teams temporarily assigned to selected sites;
 - Other mental health units or services in governmental and nongovernmental organizations.
 - Definition or updating of mechanisms for referral and counter-referral of cases
- Priority for care of highly vulnerable risk groups. Identification of specific highly vulnerable people or with special needs: deeply affected groups; women; older persons; children and adolescents; displaced persons, especially those living in shelters; persons with pre-existing mental disorders (including those living in institutions). (See Chapter 9 on supporting vulnerable groups in disaster situations);
- Care for members of the first response teams (including self-care).

5. Training on mental health and psychosocial support, including crisis intervention and psychological first aid

Training must be given to workers with first contact with victims and survivors. Issues for consideration include:

- Availability of support and teaching tools;
- Distribution of publications on mental health and psychosocial support;
- Training for health workers and other agents while circumstances are normal. The most important target groups for training are: primary health-care workers; staff responsible for the management of shelters and refuges; volunteers, first responders and humanitarian assistance staff; teachers; community leaders and health promoters;
- Continuity and follow-up of the training process in the services.

6. Health education for the population

The population should know that many psychosocial manifestations are normal emotional responses to an adverse event, how to identify problems that require assistance, and some simple measures for coping with these situations. Educational strategies for the population should include the following:

- Ensure availability of easily understandable educational material, graded by age group and level of vulnerability;
- Group awareness-raising educational activities during emergencies, involving: groups and families deeply affected by the disaster, evacuees and shelter dwellers, children and adolescents, women's groups, members of initial response teams, and other organized community groups;
- Implement health promotion and education activities with participation of community organizations, focused on children and adolescents in schools.

7. Social communication

A good strategy of information and guidance for the community is essential to promote calm and to reduce fear and suffering (see Box 3.2 “Experiencing fear during an infectious disease outbreak” and Box 3.3 “Communicating with the public during an emergency”). The following actions should form part of that strategy:

- Advise authorities on how to set up a coherent and efficient social communication system;
- Inform key political players about the need for a social communication system and the strategy defined for its establishment;
- Inform and motivate service providers about psychosocial issues;
- Help design messages directed at different population groups;
- Dispel and manage rumors;
- Evaluate the response by the population in order to quickly organize social communication activities;
- Organize, during times of risk, educational/informational campaigns in the community (e.g., during the rainy season or hurricanes).



Box 3.2

Experiencing fear during an infectious disease outbreak

Although fear is common in any disaster, it is even more common in cases when biological or chemical agents are present. Cholera and pandemic influenza are some of the threats that have been present recently in the Caribbean region. Different reasons can be given for this fear:

- The invisibility of the agent. People affected during an earthquake may quickly determine the extent of their losses or injuries, but infection with a disease may not be immediately evident and people may not be able to determine by themselves whether or not they have been infected.
- The contagion factor. The risk of a disease that spreads from person-to-person creates a situation where everyone may be a source of disease: family, friends, and health care providers themselves may transmit illness. Such a situation creates stigma, discrimination, isolation, quarantine, separation from family members, and even evacuation. These experiences increase levels of fear and stress.
- Uncertainty about the level of risk. The consequences of being infected may not be fully known. Lack of clarity among professionals involved during the outbreak and confusing messages and recommendations sent to the general population may increase public anxiety.
- Autonomic arousal. Signs and symptoms that may be normal among frightened persons (muscle tension, palpitations, hyperventilation, vomiting, sweating, tremors and a sense of foreboding) may be incorrectly attributed to a disease and lead to overwhelmed health services.
- Use of protective clothing. Using masks, respirators, or special clothing may provoke some distress due to difficulty in breathing, claustrophobic effects, limited verbal communication, and difficulties in movement.

Dissemination of appropriate information is crucial, and will have an immediate influence in annulling the effect of at least some of the reasons listed above.

Adapted from: World Health Organization, *Mental health of populations exposed to biological and chemical weapons*. Geneva. 2005

Box 3.3.

Communicating with the public during an emergency

During the acute emergency phase, it is important to establish and disseminate an ongoing reliable flow of credible information on:

- (a) the emergency;
- (b) efforts being taken to establish physical safety for the population;
- (c) information on relief efforts, including what each organization is doing and where they are located; and
- (d) the location of relatives to enhance family reunion and, if feasible, information on access to communication with absent relatives. Information should be disseminated according to principles of risk communication: e.g., information should be uncomplicated (understandable to local 12-year-olds) and empathic (showing understanding of the situation of the disaster survivor).

Source: World Health Organization, *Mental Health in Emergencies*, Geneva: WHO, 2003.

8. Intersectoral and inter-institutional coordination

Establishing coordination among sectors and agencies is a critical part of pre-disaster planning. Actions that should be taken include:

1. Identify and strengthen organizations and institutions acting directly and indirectly in the mental health field;
2. Enhance the ministry of health's stewardship role;
3. Conduct joint activities by the national mental health program and institutions responsible for disaster management;
4. Define and enhance cooperation mechanisms and establish networks at different levels;
5. Secure the commitment from organizations to implement and follow up on plans;
6. Convene assessment meetings periodically for different national stakeholders;
7. Exchange and classify experiences.

9. Community organization, social participation, and promotion of self-reliance

It is critical to involve the community at large in pre-disaster planning. Actions to this end include:

- Identify community organizations and leaders;
- Support social participation and self-help by encouraging and organizing the population to help themselves and each other;
- Encourage the population to take part in planning and implementing actions during emergencies.

10. System for registering information, indicators, and follow-up

It is important to establish a system for recording all relevant demographic and contextual information, people's experiences in the emergency, mental health and psychosocial problems, existing resources to deal with those problems, etc.

Evaluation and indicators

The follow-up and evaluation of a plan depend, to a large extent, on the use of reliable indicators and the determination of a baseline, which makes it possible to monitor progress.

Indicators that are of interest tend to relate to the structure of mental health services (for instance, the availability and conditions of existing services and resources) and processes (for instance, utilization of those services), which are important during both normal times and in emergencies. A valuable foundation on which to develop indicators for mental health during emergencies would be the existence of a reliable surveillance and data collection system that functions during normal times. Unfortunately, it is common for health systems to have no satisfactory mental health information systems, which makes it more difficult to set them up or strengthen them during emergencies.

This is further compounded by a dearth of readily available information during the emergency situation, since the information available from hospitals tends to be of little value for mental health services, as it relates mainly to physical morbidity and the increase in caseload. They usually do not reflect the true scale of psychosocial problems besetting the affected population.

Therefore, a large part of the information available during emergencies is qualitative, obtained through rapid interviews with key informants or community meetings. The information concerns not only current morbidity, but also the whole range of psychosocial problems affecting people at such times and which affect their very survival.

Regardless of the aforementioned limitations, the impact of interventions implemented as a result of the emergency should be evaluated in the long- and medium-term and will be aided by ad hoc research or specially-designed studies.

Sustainability

The sustainability of actions or strategies put in place by the emergency plan requires ongoing evaluation. The following questions will assist in measuring the success of actions taken.

- ◆ How many of the services and processes instituted during the emergency plan are sustainable? Which have proved impossible to maintain, despite their being useful and necessary?
- ◆ Have primary health care and mental health services been enhanced at the local level and have their levels of coverage increased? Are specialized professionals (psychiatrists and psychologists) with specific training available? Are health workers motivated by and sensitive to the issues raised by disasters? Have they been trained in basic mental health and psychosocial issues?
- ◆ Are there education professionals with a background in mental health and disasters? Have universities shown an interest in contributing to the training process?
- ◆ Have inter-institutional agreements been established regarding mental health and psychosocial support during emergencies? Will it be possible to maintain these agreements?

Final remarks

1. Throughout their history, many Caribbean countries have been beset by major events such as natural disasters, against a background of deep social and economic adversity. There has been enormous loss of life and property. This makes it imperative to address the psychosocial and mental health problems as a matter of State policy within the framework of a comprehensive health plan.
2. A mental health action plan in disaster situations should be founded in pragmatic, flexible, and broadly accepted principles. There are types of mental health and psy-

chological interventions that have been validated through experience and are agreed on by nearly all experts.

3. The psychosocial problems in disasters or emergencies are not solely a problem for the health sector; they also involve other players, including government agencies, NGOs, local authorities, and the community itself. The main priority of mental health work is to reintegrate persons back into their normal lives.
4. In natural disasters emergencies, the frequency of mental disorders increases, as do many other emotional manifestations that can be considered “normal responses to abnormal situations.” There is also evidence of other problems such as excessive alcohol consumption and violent behavior. The small group of persons who need specific support or specialized treatment must be identified early on.
5. There are not enough mental health specialists in Caribbean countries to provide care for all those affected by disasters. However, it is neither necessary nor desirable to rely solely on professional or specialized staff to provide all mental health care needed.
6. The mental health component must be integrated into the primary health care network. Under normal circumstances and before disasters strike, the mental health care model should be reinforced on a community basis. Frequently, the structure of mental health services does not match the needs that arise during emergencies.
7. At present, the classic concept of post-traumatic stress disorder is facing criticism. It does not apply to developing countries; most commonly, isolated symptoms of post-traumatic stress may be observed, but not the syndrome in its entirety. Specialized services that are vertical and centered on trauma treatment are not recommended. Indiscriminate psychological support activities, carried out by foreign teams or by a variety of groups simultaneously, are counterproductive.
8. The recovery work should begin immediately after the critical phase of the emergency. The psychosocial impact of a disaster is the outcome of several factors which need to be dealt with appropriately; they include the nature of the event, the extent to which an individual is affected, and the nature of the losses. It will also be necessary to ensure continual monitoring to determine the medium- and long-term repercussions.
9. Humanitarian and social assistance is an important part of the work to improve mental health of populations affected by disasters, but should be complemented with other specific interventions.
10. There is a clear relationship between human rights and mental health in disaster situations.

References

1. Inter-Agency Standing Committee (IASC) *IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings*. Geneva: IASC, 2007. <http://tinyurl.com/r2mh4f>.
2. J. Rodriguez, M. Zaccarelli. R. Perez. *Guía práctica de salud mental en situaciones de desastres. Serie de manuales y guías sobre desastres No. 7* (Spanish only). Washington, D.C.: OPS/OMS, 2006.
3. Organización Panamericana de la Salud (OPS/OMS). *Protección de la salud mental en situaciones de desastres y emergencias. Serie de manuales y guías sobre desastres No. 1* (Spanish only). Washington, D.C.: OPS/OMS, 2002. <http://tinyurl.com/8xytcyp>.
4. Pan American Health Organization (PAHO/WHO). *Guide to drawing up national plans for mental health during disasters and emergencies in the countries of Central America*. Washington, D.C.: PAHO/WHO, 2003. http://www.who.int/mental_health/media/paho_guide_mnh_plans.pdf.
5. Pan American Health Organization (PAHO/WHO). *Subregional master plan for the protection of mental health during emergencies and disasters*. Washington, D.C.: PAHO/WHO, 2004. <http://tinyurl.com/7w85ly2>.

Assessment of Mental Health and Psychosocial Needs and Resources: WHO Toolkit

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Why conduct needs assessments?

Before implementing programs, it is crucial that health care actors broadly understand the humanitarian situation they are working in and know what the main problems of and resources for the affected population are (1, 2). For example, the needs in a camp established for internally displaced persons, which has existed for many years, may be very different from needs in an area that has recently been struck by an earthquake.

Needs assessments are an essential, high-priority response that should be started as soon as possible in a humanitarian crisis (ideally before a crisis, as is further explained below). They are one of the first things that need to be done, and one which will lay the foundation for subsequent actions (2).

Why a toolkit?

The IASC Guidelines on mental health provide a good overview of what types of topics should be covered in a needs assessment (2). However, these guidelines do not provide clear guidance on how needs assessments should be conducted. Also, they do not always make a clear link between information collected in needs assessments and the design of mental health and psychosocial support programs. The “Mental Health and Psychosocial Needs and Resources in Major Humanitarian Crises: WHO Toolkit for the Health Sector”³ is being developed to fill this gap, with a focus on the role of actors in the health sector.

What are needs assessments?

Needs assessment are referred to here as the collection of information to guide the implementation of mental health and psychosocial support programs in humanitarian settings. This information may (a) be already existing data, (b) may be new information collected by

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9. Department of Mental Health and Substance Abuse, World Health Organization.

10. The *WHO MHPSS Assessment Toolkit* is a draft document. Copies are available from Dr. Wietse Tol (wietse.tol@yale.edu) or Dr. Mark van Ommeren (vanommerenw@who.it). In the near future, a final version will be available at the WHO Mental Health website: http://www.who.int/mental_health/en/.

others (e.g. as part of multi-agency efforts), or (c) may be new information collected by you and your team.

Needs assessments are not a one-off effort. They must be conducted repeatedly (see Figure 4.1), because needs in a humanitarian setting change over time. Needs assessments are also different depending on a number of factors. In other words, there is no “one-assessment-fits-all” format. They depend on (a) the phase and type of the emergency (e.g. in acute phases of a humanitarian crisis, the focus should be on quick assessments that lead to immediately useful results); (b) the mandate and particular skills of the organization (e.g. a child-focused organization would likely have little experience in collecting information on needs of older persons); (c) the information that is already available (identified through a desk review); and (d) for what specifically the assessment information will be used (e.g. an organization or service focused on severe mental disorders will likely need more information on available psychiatric resources).

How are needs assessments conducted?

Needs assessments should be conducted in a flexible manner and should be tailored to the situation. It is generally not possible or advisable to do an assessment of all relevant topics at once, and a selection of assessment topics should be made. Based on this selection, there are different tools available to collect information (see next paragraph). Because assessments usually focus on selected topics, it is crucial that organizations collaborate, so that each assessment can contribute to a more complete picture of the needs and resources in humanitarian settings.

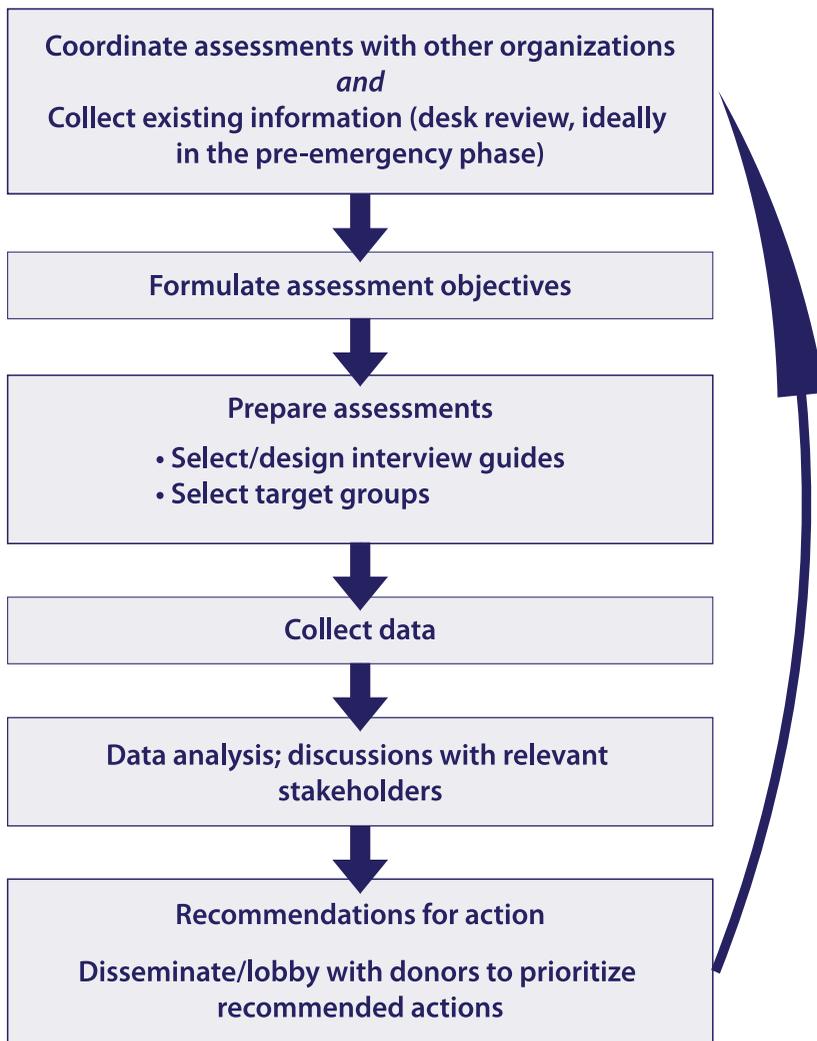
In general, the following things are good to keep in mind when selecting assessment topics.

- (1) Develop a clear framework and objectives of your assessment. This will help to prioritize the information needed, select the tools, as well as determine the capacity to respond to data collected.
- (2) Remember that time is short and resources are limited. Do not burden people unnecessarily; study of already available information is crucial to minimize the topics for further assessment. There is no point in collecting the same information twice, unless there is doubt whether existing information is up-to-date or of sufficient quality. Only collect information that will likely lead to humanitarian actions.
- (3) There is no need for in-depth information on all topics at every point. The information needed depends on an agency’s mandate and capacity to act on the assessment. When assessments become too broad, it is difficult to collect good quality information on all topics.
- (4) Collaboration is crucial. When inter-agency (including governments) assessments are done, the large burden of doing assessments can be shared across agencies. Inter-agency assessments are recommended, because they tend to be more credible, and they tend to facilitate collaborative planning. Agencies may divide topics and select a number of more specific topics according to the agencies’ strengths.

- (5) Check validity of your information. Choices for methodology should be based on available resources (skills, time, money), and the decision to check the validity of findings by collecting related information in more than one way (so-called “triangulation”). For example, if you are interested in changes in utilization of mental health services, you could compare perspectives from community leaders as well as household surveys. The forthcoming WHO Toolkit provides more than one method to assess an issue. Assessors will want to select the methods most appropriate and feasible for them.

Figure 4.1 provides an overview of the assessment process.

Figure 4.1 Overview of the Assessment Process



What specific techniques can be used in needs assessments?

In general, a variety of techniques are used in assessments, both qualitative (e.g., open-ended questions in individual and group interviews, observation, and mapping) and quantitative (e.g., surveys). The WHO Toolkit does not include surveys on the distribution and course of mental disorders (i.e., psychiatric epidemiology). Such surveys are very difficult to conduct in a meaningful way in humanitarian settings. This is mainly because they require specific technical work to try to distinguish between normal psychological distress (i.e., psychological complaints that can be expected in difficult situations) and mental disorders (i.e. “a clinically recognizable set of symptoms or behaviors associated in most cases with distress and with interference with functioning”). Also, in the early phases of a humanitarian crisis, it is not likely that psychiatric epidemiological information can quickly lead to concrete recommendations for humanitarian action.

Table 4.1 provides an overview of the tools that are included in the forthcoming WHO Toolkit. Tools are listed in accordance with the actions by health actors that are recommended by the recently revised Sphere Handbook (1).

Table 4.1 Overview of tools in the WHO Toolkit

Tool #	Title	Method	Why use this tool
For coordination and advocacy			
1	Who is Where, When, doing What (4Ws) in Mental Health and Psychosocial Support: Summary of Manual with Activity Codes	Interviews with agency programme managers	For coordination, through mapping what mental health and psychosocial supports are available
2	WHO Assessment Schedule of Serious Symptoms in Humanitarian Settings (WASSS)	(Component of) community household survey (representative sample)	For advocacy, by showing the prevalence of mental health problems in the community
For MHPSS through health services			
3	Checklist for Site Visits at Institutions in Humanitarian Settings	Site visit, interviews with staff and patients	For protection and care for people with mental or neurological disabilities in institutions
4	Checklist for Integrating Mental Health in Primary Health Care (PHC) in Humanitarian Settings	Site visit, interviews with PHC programme managers	For planning a mental health response in PHC
5	Neuropsychiatric Component of the Health Information System (HIS)	Clinical epidemiology using health information system	For advocacy and for planning and monitoring a mental health response in PHC

Tool #	Title	Method	Why use this tool
6	Mental Health System Formal Resources in Humanitarian Settings	Review of documents, interviews with managers of services	For planning (early) recovery/ (re-) construction, through knowledge on formal resources in the regional/national mental health system
For MHPSS through diverse sectors, including through community support			
7	Checklist on Obtaining General (non-MHPSS specific) Information from Sector Leads	Review of documents by sector lead	For summarizing general,(non-MHPSS specific) information already known about the current humanitarian emergency (to avoid collecting new data on what is already known)
8	Template for Desk Review of Pre-Existing Information Relevant to Mental Health and Psychosocial Support in the Region/Country	Literature review	For summarizing MHPSS information about this region/ country - already known before the current humanitarian emergency (to avoid collecting new data on what is already known)
9	Participatory Assessment I: Perceptions by General Community Members	Interviews with general community members (free listing with further questions)	For learning about local perspectives on problems and coping in a participatory manner to inform MHPSS response
10	Participatory Assessment II: Perceptions by Community members with in-Depth Knowledge of the Community	(Individual or group) key informant interviews	
11	Participatory Assessment III: Perceptions by Severely Affected Persons Themselves	Interviews with severely affected persons (free listing with further questions)	
12	Humanitarian Emergency Setting Perceived Needs Scale (HESPER)	Community household survey (representative sample) (early in emergencies this method may also be adapted in convenience samples of key informants)	

Tool 1 (Who is Where, When, doing What (4Ws) in Mental Health and Psychosocial Support: Summary of Manual with Activity Codes) can be used to map existing and planned mental health and psychosocial support programmes. The results are essential for coordinating services (e.g. geographically between actors, to avoid duplication, or to identify gaps in service delivery).

Tool 2 (WHO Assessment Schedule of Serious Symptoms in Humanitarian Settings—WASSS) covers surveillance of common serious symptoms in humanitarian settings. This tool includes a section for integration into household surveys to identify people with severe

symptoms and impaired functioning. Data from this tool will be helpful in advocacy for mental health.

Tool 3 (Checklist for Site Visits at Institutions in Humanitarian Settings) may be used when visiting institutions for people with severe mental disorders and other neurological disabilities. Questions on the checklist can be filled in during a walkabout and interviews with staff/ patients, and may be particularly useful in the beginning phases of a humanitarian crisis to ensure continuity of care and protection of the human rights of those held in institutions.

Tool 4 (Checklist for Integrating Mental Health in Primary Health Care in Humanitarian Settings) may be used to assess specific psychological and social considerations in the provision of general health care, focused specifically on primary health care. It can be filled out through interviews and through observation (1 checklist per organization).

Tool 5 (Neuropsychiatric Component of the Health Information System—HIS), a UHNCR tool that provides a format for documenting neuropsychiatric disorders and problems (seven categories), as part of primary care practice. Documenting these seven categories may provide an indication of the main mental problems in a humanitarian setting.

Tool 6 (Summary of mental health system formal resources) provides a format for collecting existing data on the types of resources available for mental health, particularly formal mental health resources, e.g. psychiatrists, psychologists, nurses, social workers, etc. in government mental health care, NGOs and private practices.

Tool 7 (Checklist for Obtaining General (non-MHPSS-specific) Information from Sector Leads) provides an overview and checklist for the collection of existing information from different humanitarian sectors/clusters, linking assessment topics with relevant sectors/clusters.

Tool 8 (Template for Desk Review of Pre-Existing Information Relevant to Mental Health and Psychosocial Support in the Region/Country) provides an overview of topics that need to part of a desk review of existing information, including contacting local and international experts on the crisis. To avoid overburdening populations affected by humanitarian crises, it is crucial that all the information that is already available is put to the best possible use.

Tool 9 (Participatory Assessment I: Perceptions by General Community Members) provides a format for free listing—a technique in which one question is asked to generate a great deal of information (e.g., what types of problems were caused by the crisis?; what do people do to deal with these problems?; etc.). Free listing may be especially useful to gather a quick general idea on problems and resources that can be used for later, more in-depth follow-up.

Tool 10 (Participatory Assessment II: Perceptions by Community Members with in-Depth Knowledge of the Community) provides questions that may be used for interviews with community members who have in-depth knowledge of problems and resources in their community. Questions focus on sources of distress, how distress is expressed, how assistance is being sought for distress, and who may be at heightened risk for distress.

Tool 11 (Participatory Assessment III: Perceptions by Severely Affected Persons) provides example questions to ask to general community members who are suffering distress. It can be used to compare with data collected by general community members who do not particularly suffer these problems and key informant interviews.

Tool 12 (Humanitarian Emergency Setting Perceived Needs Scale (HESPER) was developed by WHO and the Institute of Psychiatry at King's College London (2011) to rapidly assess perceived needs of populations in humanitarian settings during conflict or other disasters in low- and middle-income countries. The scale, uniquely, provides a population-level assessment of the prevalence and distribution of needs as perceived by members of the population themselves.

How can assessments lead to recommendations?

Providing recommendations for humanitarian action is the main goal of doing an assessment. In general, the more precise a recommendation, the more useful it is. Recommendations should include, at a minimum, the following information: (a) to whom the recommendation is addressed (e.g., the government, health sector actors, protection sector actors, education sector actors, specific organizations, etc.); (b) the target group; (c) the problem targeted; (d) the suggested intervention, or how the intervention may be developed together with the target population; and (e) links with relevant guidance (e.g., from the IASC MHPSS Guidelines or Sphere Handbook). When there are multiple recommendations, they should be ordered in terms of priority. Ideally, ideas for recommendations are discussed with the target group before they are put on paper or finalized. The IASC MHPSS Guidelines recommend implementation of MHPSS in a multi-layered system of care. It is often helpful to provide recommendations for each of the layers of the IASC pyramid (see 2).

References

1. Sphere Project. *Humanitarian Charter and Minimum Standards in Disaster Response*. Geneva: The Sphere Project, 2011. <http://www.sphereproject.org>.
2. Inter-Agency Standing Committee (IASC). *IASC guidelines on mental health and psychosocial support in emergency settings*. Geneva: IASC, 2007. <http://tinyurl.com/r2mh4f>.
3. IASC Global Health Cluster. *Health resources availability mapping (HeRAMS)*. Geneva: WHO, 2009. <http://tinyurl.com/7llrvcl>.
4. IASC Reference Group on Mental Health and Psychosocial Support in Emergency Settings. *Who is where, when, doing what (4ws) in mental health and psychosocial support: manual* (field test version). Geneva: IASC (forthcoming).
5. United Nations High Commissioner for Refugees (UNHCR). *Health information system (HIS)*. Geneva: UNHCR, 2009. <http://tinyurl.com/86vno4c>.
6. United Nations High Commissioner for Refugees (UNHCR), World Health Organization (WHO). *Rapid assessment of alcohol and other substance use in conflict-affected and displaced populations: a field guide*. Geneva: UNHCR and WHO, 2006. <http://tinyurl.com/6oo46ft>.

The Epidemiology of Mental Health Issues in the Caribbean

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Roger C. Gibson¹³

Introduction

The Caribbean region consists of 26 countries and territories,¹⁴ and most countries in the region are classified as Small Island Developing States (SIDS) by the United Nations, with Haiti being classified as one of the least developed countries in the world (2, 3). This classification indicates a country's economic stability as measured by gross national income per capita (GNI) as well as its accomplishments in the area of human development. The situation in Haiti has serious implications when put in the context that 66% of the world's population living in the poorest countries accounts for 95% of the mortality due to disasters (4).

The disruptions in normal day-to-day activity caused by disasters are particularly burdensome and have extremely far-reaching repercussions for small nation states with limited resources for rebuilding and with entrenched social and political problems. Unfortunately, these factors are characteristic of many countries and territories of the Caribbean and make disaster and disaster mitigation complex issues to deal with. Furthermore, history has demonstrated that the Caribbean is highly vulnerable to disasters, both natural and human generated. Hurricanes, floods, earthquakes, volcanoes, droughts, and mass deaths due to illness or violence are some of the hazards that have affected the region.

Between 1970 and 2000, the Caribbean region recorded an average of 32.4 disasters per year, which caused a total of 226,000 fatalities or approximately 7,500 deaths per year (6). Significantly, earthquakes accounted for 53% of total mortality associated with disasters in the region (6). In light of current statistics of loss of life as a result of the 2010 earthquake in Haiti, these numbers seem less alarming as an aggregate loss over a 30-year period. Though the official count remains undetermined, Haitian authorities have recorded at least 230,000

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14. Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, British Virgin Islands, Cayman Islands, Cuba, Dominica, Dominican Republic, Grenada, Guadeloupe, Guyana, Haiti, Jamaica, Martinique, Montserrat, Netherlands Antilles, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Turks and Caicos Islands and U. S. Virgin Islands.

(5). This number represents almost 3% of the nation's population. This is without doubt one of the highest death tolls in a modern disaster.

The impact of a disaster, whether human-generated or natural, on the mental health of any population is both vast and deep in its ramifications. Caribbean culture, social norms, and patterns of stress response are likely to contribute to differing reactions to disaster among the people of the region. Research has demonstrated that perceptions of stress, resilience, and coping in response to disasters vary among different cultural groups and this is evident from differences in mental health outcomes following disasters (7). The severe personal stress associated with disasters may result in the onset of new mental health problems or in the worsening of pre-existing ones. It is therefore important to have a profile of the Caribbean in terms of frequently encountered mental health issues, which are present on an ongoing basis. Information on the most commonly encountered psychiatric conditions is presented below.

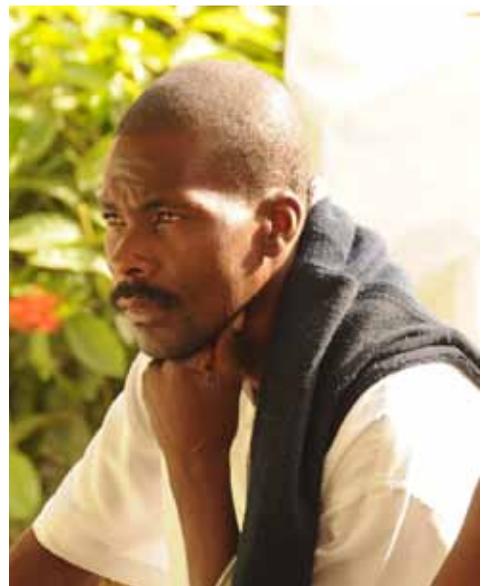
Psychiatric conditions

Psychotic disorders

These conditions are characterized by alterations in a person's perception of reality. This is manifested in the form of delusions (fixed, false beliefs out of keeping with one's social and cultural background), hallucinations (hearing, seeing, smelling, tasting, or feeling things which are not really there), difficulties in organizing and expressing thoughts, and displays of behavior that are unusual in the context of individual and cultural norms. The most long lasting of these disorders is schizophrenia, which has been shown to have an incidence (annual rate of the occurrence of new cases) of 2–3 per 10,000 persons in the general population. This rate has been fairly consistent across a number of Caribbean countries (Jamaica, Barbados, Trinidad and Tobago, and Suriname) (8-11). Rates are higher in very small islands, perhaps as a result of selective migration (persons with mental illness are less likely to emigrate and more likely to return home if living abroad). This is exemplified by the rate in Dominica, which has been calculated as 11.8/10,000 (12). In general, persons with psychiatric conditions are at risk for decompensation (decreased ability to carry on with activities of daily living) in the face of stressful circumstances. The severe stress associated with disasters can be expected to be associated with a worsening of features of mental illness, including psychotic symptoms.

Mood disorders

These conditions affect emotional experiences to the extent that a person may have prolonged periods of feeling sad with low interest, low energy, poor concentration, a sense of hopelessness,



and sometimes suicidal thoughts, which constitute depression. The opposite may also occur and individuals may experience unexplainable euphoria associated with increased energy, impulsiveness, and racing thoughts, which constitutes mania. Mania is part of a condition known as bipolar disorder, in which persons may have episodes of depression on some occasions and mania on others.

In a lifestyle survey in Jamaica, as many as one in five respondents between the ages of 15 and 74 years reported significant features of depression in the past month (13). Other evidence for a high rate of occurrence includes the finding that 25%–45% of all persons receiving treatment for physical illnesses in Trinidad and Tobago also have features of depression (14).

Data on bipolar disorder indicate an admission rate of 0.8 per 1,000 hospital admissions in Trinidad and Tobago and 12/100,000 in Jamaica (15, 16).

The low energy, loss of interest, and impaired concentration may reduce one's ability to react rapidly and appropriately in the face of an emergency. The stress of a disaster can also be expected to be associated with a worsening of depressive as well as bipolar symptoms.

Suicide

Suicide is associated with a psychiatric illness in 70% of cases, with depression being the most frequently occurring psychiatric diagnosis (60%). Rates vary across the Caribbean with 2.0–2.7/100,000 in Jamaica (17), 4.0/100,000 in Barbados (18) and 12.3/100,000 in Trinidad and Tobago (19). There appear to be cultural differences, with particularly high rates among persons of East Indian descent. Completed suicide (an attempt resulting in death) is more common in males, who tend to use more lethal methods than females. Suicidal behavior is often carried out with a sense of ambivalence and in an environment of frustration. The devastation, displacement, and hopelessness, which may occur in the aftermath of a disaster, may heighten the risk of suicide.

Dementia

Dementia is marked by memory impairment and difficulty with processing thoughts and information; it primarily affects older persons. As life expectancy continues to increase in the Caribbean, it can be expected that the prevalence of this condition will increase. Data from Cuba (20) indicate that roughly 10% of persons over the age of 65 suffer from dementia. The risk for dementia is increased with advanced age, poor education, and a positive family history. The impact of dementia is far-reaching and may cause both emotional and financial strain on caregivers. To have a disaster superimposed on such a situation could prove overwhelming.

Anxiety disorders

Anxiety disorders are conditions in which there are inner experiences of fear and tension as well as outward manifestations of anxiety (e.g., rapid heart rate, trembling) to the extent that they are excessive, distressing, or impair the ability of the affected individual to function.

As of July 2010, epidemiological data on this condition is lacking for the Caribbean region. However, the disruption and displacement caused by disasters can be expected to increase the propensity for anxiety disorders and reactions.

Persons with mental disorders as a vulnerable group

The stress and upheaval that invariably result from disasters increase not only the risk of the development of new mental disorders, but also the exacerbation of pre-existing ones. Persons with psychiatric illnesses are therefore a vulnerable group in the face of a disaster. Many community mental health services have psychiatric registers, which may assist with identifying persons at risk in order to prevent adverse mental health outcomes. Strategies such as ensuring continued access to medication and therapeutic and emotional support are crucial for achieving that goal (see Chapters 9 and 12).

References

1. CaribSeek Encyclopedia website, 2010 [cited 25 March 2010]. <http://tinyurl.com/7tzwacx>.
2. United Nations Conference on Trade and Development website, 2010 [cited 25 March 2010]. Available from: <http://www.unctad.org>.
3. United Nations Office of the High Representative for the Least Developed Countries (UN-OHRLLS) website, 2010 [cited 25 March 2010].
4. Noji, E.K. (ed.). *The public health consequences of disasters*. New York: Oxford University Press, 1997. <http://www.ncbi.nlm.nih.gov/pubmed/11227602>.
5. International Monetary Fund (IMF). *Eastern Caribbean Currency Union: Selected Issues, IMF Country Report No. 04/335*. Washington, D.C.: IMF, 2004. Available from: <https://www.imf.org/external/pubs/ft/scr/2004/cr04335.pdf>.
6. <http://www.islandvulnerability.org/caribbean.html>.
7. Charvériat, C. *Natural disasters in Latin America and the Caribbean: an overview of risk*. Washington, D.C.: Inter-American Development Bank, 2000. <http://tinyurl.com/7cypezv>.
8. Ring, K., S. Carmichael. "Montserrat: a study of Caribbean resilience (1999–2005)." *Caribbean Journal of Social Work Educators*. 2006; 5:9–28.
9. Hickling, F.W., P. Rodgers-Johnson. "The incidence of first contact schizophrenia in Jamaica." *Br J Psychiatry*. 1995;167:193–6. <http://www.ncbi.nlm.nih.gov/pubmed/7582668>.
10. Mahy, G.E., R. Mallett, J. Leff, D. Bhugra. "First-contact incidence rate of schizophrenia in Barbados." *Br J Psychiatry*. 1999;175:28–33.

11. Bhugra, D., M. Hilwig, B. Hossein, H. Marceau, J. Neehall, J. Leff, R. Mallett, G. Der. "First-contact incidence rates of schizophrenia in Trinidad in a one-year follow-up." *Br J Psychiatry*. 1996; 169:587–592.
12. Selten, J.P., C. Zeyl, R. Dwarkasing, V. Kumsden, R.S. Kahn, P.N. Van Harten. "First-contact incidence of schizophrenia in Suriname." *Br J Psychiatry*. 2005; 186:74–75.
13. Kay, R.W. "Prevalence and incidence of schizophrenia in Afro-Caribbeans." *Br J Psychiatry*. 1992;160:421.
14. Wilks, R., N. Zohoori, D. Ashley, P. Figueroa. *The Jamaica health lifestyle survey*. Kingston: Ministry of Health, 2000.
15. Hutchinson, G., F.W. Hickling. "Epidemiology of mental illness," In: F.W. Hickling, E. Sorel (Eds.), *Images of psychiatry in the Caribbean*. Kingston: University of the West Indies, 2005.
16. Neehall, J. "An analysis of psychiatric inpatient admissions from a defined geographic catchment area over a one-year period." *West Indian Med J*. 1991; 40:16–21.
17. Hickling, F.W. "Psychiatric hospital admission rates in Jamaica, 1971 and 1988." *Br J Psychiatry*. 1991;159:817–21.
18. Abel W.D., P.A. Bourne, H.K. Hamil, E.M. Thompson, J.S. Martin, R.C. Gibson, F.W. Hickling. "A public health and suicide risk in Jamaica from 2002 to 2006." *North American Journal of Medical Sciences*. 2009;1:142–47.
19. Mahy, G. "Completed suicide in Barbados." *West Indian Med J*. 1987; 36:91–94.
20. Hutchinson, G., D. Simeon. "Suicide in Trinidad & Tobago, associations with measures of social distress." *Int J Soc Psychiatry*. 1997; 43: 269–275.
21. Querol, C.M., V.T. Pérez Martínez, M. Carballo Pérez, G.V. Herrera. "Estudio clínico epidemiológico del síndrome demencial." *Rev Cubana Med Gen Integr*. 2005; 21:3–4.
22. Llibre Rodríguez, J., A. Valhuerdi Sanchez II, C. Reyna , M.A. Guerra, J.R. Copeland, P. McKeigue, C.P. Ferri, M.J. Prince. "The prevalence correlates and impact of dementia in Cuba. A 10/66 group population-based survey." *Neuroepidemiology*. 2008; 31(4):243–51.

Cultural Competence and Empowering Communities

Shirley Alleyne¹⁵

Definition of culture

The Merriam-Webster Dictionary provides several definitions of culture: the integrated pattern of human knowledge, belief, and behavior that depends upon the capacity for learning and transmitting knowledge to succeeding generations; the customary beliefs, social forms, and material traits of a racial, religious, or social group; also: the characteristic features of everyday existence (as diversions or a way of life) shared by people in a place or time (1). Culture is central to every aspect of life; it defines how persons who share similar beliefs and behavioral patterns will prepare, respond, and recover from major events such as disasters (2).

Factors influencing culture

Historical events

Culture is influenced by many factors including past experiences of a group, both negative and positive: an example of a negative experience is the fear some African-Americans have of being victimized, which that can be attributed, in part, to the Tuskegee Syphilis Study (3); a positive experience could be the sharing of responsibilities and care giving by the extended family in Caribbean culture, in part developed out of the limited finances of post-colonial Caribbean families.

Religion

In the Caribbean, religion is an important influencing factor because of the previously pivotal role churches played in providing education, sustenance, and shelter. Churches were also influential in the



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pooling of resources to supply the needs of many in the extended family model. For instance, the societal roles of males and females, and the expected behaviors of children in the Caribbean are largely guided by the predominant Christian and Hindu faiths.

Economic context

The economic context of a country shapes cultural practices, such as the sharing of homes and financial responsibilities by members of the extended family and the employment status of various members of the household. As the economies of the Caribbean countries have improved over time, nuclear families have become more dominant and the influence of North American culture has increased, resulting in some changes to cultural practices.

Culture and gender

Gender roles are defined by societal norms influenced by a number of factors. Gender roles in the Caribbean have evolved, as more females attain tertiary education and assume jobs traditionally seen as “men’s work” (4). Women are the heads of the household in the majority of Caribbean homes and it follows that in emergency situations, women often carry the burden of accessing assistance (e.g., food, repairs, and medical supplies) for their households. Women also do the majority of caretaking for the youth and older persons, so the success of a family in emergency situations is especially dependent on the well-being of women.

Culture and perceptions of mental health/mental disorders

The perception of mental health and mental disorders are in part colored by the population’s past experiences with emotional disorders. In the Caribbean, some religious groups see mental illness as a weakness of faith or a punishment for having offended the higher powers. These beliefs result in feelings of extreme guilt for those believers who become ill, delays in accessing medical treatment for fear of societal scorn, and noncompliance with treatment recommendations.

Some religious groups also believe that psychosis is a sign of demonic possession, again contributing to ostracism and the stigmatization of the mentally ill. Exorcism and rituals performed by non-traditional healers have been utilized in some communities where persons believe in obeah, or the use of magic rituals, to ward off misfortune, or to cause harm. This has contributed to the number of persons with persistent mental illness who delay accessing mental health services until their illness is in the advanced stage.

A review of culture and mental health issues in Haiti is presented in Box 6.1. This summary examines cultural perceptions of mental illness, non-traditional approaches to mental health care, and the structure of the country’s mental health services. The article was prepared following the earthquake of 2010.

The perceived higher rate of mental disorders in Caribbean persons who have spent time in the United Kingdom has led to the belief that travel abroad results in mental illness. Similarly, there is the belief that intensive academic pursuit contributes to mental illness, or that it can result from the administration of a secret potion by an ill-intentioned partner.

The predominantly authoritarian style of parenting and the historical belief that “children are to be seen and not heard,” the dearth of child and adolescent mental health specialists, and the history of limited advocacy in the area of the emotional health of children and adolescents has led to a generally poor understanding of the emotional challenges faced by these groups in the Caribbean.

Limited understanding of the emotional world of children and adolescents can be compounded by the sanctioning of corporal punishment by many cultures in the region, which can result in acts of severe physical discipline. This becomes particularly concerning in a post-disaster phase, as children may display externalizing symptoms, behaviors which are misinterpreted by adults whose harsh discipline serves to further endanger the emotional well-being of the child. Conversely, social withdrawal and quietness associated with internalizing disorder (depressive and anxiety disorders) are likely to be mistaken for “good behavior.”

Box 6.1

Summary of “Culture and Mental Health in Haiti: A Literature Review”¹⁶

Andrena Pierre¹⁷

Introduction

On 12 January 2010 a devastating earthquake struck Haiti, causing more than 200,000 deaths, injuring thousands, and leaving many homeless. Important governmental, health, educational, and commercial buildings as well as public infrastructure were damaged or destroyed. In the face of the trauma and loss caused by this catastrophic event, the international response included the deployment of foreign medical teams to address the health needs of the Haitian population. In an attempt to provide some useful local background to the deployed international mental health professionals, the Department of Mental Health and Substance Abuse of the World Health Organization (WHO) commissioned the document “Culture and Mental Health in Haiti.” The document is a review of scholarly and grey literature in English and French on the perceptions by Haitians of mental health and mental health services in their country before the earthquake.

The Socio-Cultural Context

Haiti is bordered by the Dominican Republic on the island of Hispaniola, which is approximately 600 miles south-east of Florida. As with many countries in the Caribbean, Haiti was marked by slavery, which began at the end of the fifteenth century. However, in 1804, Haitian slaves defeated their masters and Haiti became the first Black republic. Since then, Haiti has endured economic marginality and political instability. As a result, many Haitians have emigrated in search of better lives, with a large diaspora sending financial support to those they have left behind in Haiti.

Haiti has a growing population of more than nine million, 50% of whom are under the age of 20, with a large percentage (60%) living in rural areas. The two official languages are Creole and French; however, while Creole is spoken by the vast majority, only a minority speaks, writes, and understands French. As part of the legacy of slavery and colonization, Haiti is marked by a class hierarchy based on language, education, and economic background. These factors also influence Haitians’ explanations of illness and utilization of formal and informal mental health services. The society is structured in such a way that gender roles are clearly defined, with men having the authority and women the responsibilities in all aspects of social life. Parental rights and children’s duties are also clearly defined.

16. Kirmayer, L.J, et al. Culture and mental health in Haiti: a literature review, WHO/ MSD/MER/10.1. Geneva: WHO, 2010. Available at: <http://tinyurl.com/7qmejh3>.

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Haiti is characterized by religious diversity with Vodou, Roman Catholicism, and Protestantism being the most prevalent religions. Despite numerous divergences between the followers of these religions, all share a belief in the spirit world. Hence, health and illness are explained in terms of one's connection to God and the healing practices. Catholics and Protestants may use prayer rituals to deal with mental and physical illness. Both religious affiliations and family networks constitute important coping resources in time of stress and difficulties.

Knowledge of the prevalent diseases and causes of mortality in different age groups can help health professionals in the process of giving a diagnosis, as most Haitian patients expect to be asked about the presence of a series of symptoms during a diagnostic consultation. Many Haitians use a humoral theory in which illness is caused by an imbalance of hot and cold within the body. In this system, treatment (which includes herbal teas, regulated diet, compresses, baths, and massages) must be in the opposite direction of the imbalance in order to restore equilibrium.

Mental illnesses are often attributed to supernatural forces in that they may be caused by a spell or hex, or a failure to please spirits. This external attribution may be helpful for recovery in that people can call upon the spirits or God to intervene on their behalf to assist healing. Moreover, because people are seen as victims of forces beyond their control, they are more likely to be provided with social support. The more severe cases of mental illness can be associated with social stigma and shame; hence, the family may be reluctant to acknowledge that a member is mentally ill.

Although there are no systematic data on the prevalence of mental health problems in Haiti, the prevalence of disorders such as schizophrenia, bipolar disorder with mania, and other psychoses are no different from that in other countries. People with no access to hospitals or medical treatment who have suffered repeated psychosis episodes and have impaired functioning may be labelled 'fou' (crazy) and their cognitive ability may not be trusted even after remission. The symptoms of schizophrenia are based on concepts of self and non-self. As such, it is important to understand Haitians' cultural and religious concepts of the person in order not to mistake normal spiritual beliefs and practices for evidence of psychological and psychiatric problems.

In Haiti the word "depression" is used to refer to discouragement while *dépression mentale* refers to depression as understood in Western psychiatry. Depression is expressed mostly in terms of somatic symptoms and is not considered as a mental illness per se, but as a state of debilitation due to physical health conditions such as anaemia. Individuals experiencing depression usually seek support and guidance from family networks.

The earthquake has been a profoundly traumatic event: many people witnessed death and severe injury or lost loved ones and belongings. Disorders related to trauma and loss are more likely to develop in individuals who have pre-existing vulnerabilities, such as exposure to various types of violence, prior to the earthquake. The loss of status or social roles that results from material loss may elicit distress in the forms of feelings of shame, humiliation, and powerlessness.

Dissociative phenomena commonly seen in Haiti include various forms of possession trance. In this context, it is important to distinguish possession associated with schizophrenia from the religious experiences of possession, where a spirit enters a member of a religious congregation in order to punish, reward, or treat another member of the congregation. Folk diagnoses include *sezisman*, *endipozisyon* and *pedisyon*. *Sezisman* is a state of paralysis provoked by the shock of unexpected events such as receiving sad news concerning a loved one or witnessing a traumatic event. Treatment of *sezisman* includes herbal teas, cold compresses on the forehead, and support and care from relatives. *Endipozisyon* or fainting is due to unbearable emotional distress or some bodily pain and is more common among women; it is thought to be due to hot or bad blood. *Pedisyon* is a condition of arrested pregnancy that may persist for months or years. It is thought that at some point during the pregnancy the uterine blood is diverted from the fetus, which stops growing. Because maternity is an important aspect of a woman's life in Haiti, this condition may allow infertile women to claim the status of "being with a child."

Mental Health Services

The health care system is divided into four sectors: public institutions, non-profit NGOs and religious organizations, mixed non-profit organizations, and for-profit private clinics. Most institutions are independent; there is no network. While most people value professional biomedical services, about half of the population experience limited access to health care services because of structural costs, distance, and location. Hence, many people wait until their illnesses are in the advanced stage. Consequently, many view hospitals as places “where people go to die.” Death is considered as a natural part of the cycle of life. Deceased family members continue to play important roles as they are thought to advise and help their descendants through dreams. Death rituals and burial are very important. Thus, in the aftermath of the earthquake, the uncertainty about the fate of a deceased loved one may elicit nightmare and concerns when thinking about the dead.

In the absence of a well-developed mental health care system, Haitians have learned to deal with their mental and physical illnesses on their own, using the social support of family, community, and religious networks as well as the services of herbalists, bone setters (who treat conditions such as broken bones), injectionists (who administer herbal or Western preparations), and midwives. Upper- and middle-class Haitians are more likely to seek psychiatric care.

Regardless of the type of illness, advice regarding treatment is usually sought first from family members and relatives. For instance, Haitians may not readily accept psychotherapy to solve personal problems, because these are viewed as family or religious matters. Hence, successful treatment will include collaboration with family and the community of the patient. Health care professionals are expected to be engaging and active in resolving issues. Consequently, it is important for clinical practitioners to be aware of patients’ understanding of illness and their expectations regarding the treatment.

Culture and help-seeking behaviors

The cultural beliefs with respect to mental illnesses and mental health services impact help-seeking behaviors. Although we can make generalizations as to these behaviors about members from the same cultural group, variations do occur as a result of a number of factors including age and educational status.

In the Caribbean region, as in many other regions, the history of treatment of mental illness has been one of institutionalization and limitation of the rights of patients; this in part accounts for the stigma associated with mental disorders and discrimination against clients who seek mental health services (5). At the same time, because of the influence of religious leaders and fear of being stigmatized for seeking mental health services, some persons will frequently seek the counsel of their clergy or non-traditional healer before accessing mental health services (6–8).



The traditional structure of the Caribbean family is such that children and adolescents are seen as an extension of their parents and therefore, in general, medical services to children and adolescents cannot be provided without the approval of their parents. As a result of the low awareness of and the stigma associated with receiving mental health services, children and adolescents with emotional challenges often remain untreated because of lack of knowledge on the part of the parents or guardians. Parents must sanction treatment for their children and can refuse mental health services for children who are severely ill.

Compliance with treatment recommendations may be a challenge because of pervasive rumors about psychotropic medications, including beliefs that they result in “madness”; as a result, persons generally seek medical treatment when symptoms are advanced.

Families are more likely to seek mental health services for relatives who exhibit violent or bizarre behaviors because of the fear that they might cause bodily harm to others. Reintegration into society post-treatment for clients with a past history of violence is particularly challenging as they face discrimination and rejection by their families.

Cultural competence of disaster response teams

Box 6.2 lists questions that mental health teams should ask when planning their response to disaster. These questions are built around the topics covered in the previous section: factors that influence culture, how culture shapes beliefs about mental health, and attitudes about seeking assistance. As outlined above, cultural groups have characteristic ways of coping in times of disaster. The method of coping is inclusive of the way in which the group prepares and responds to disaster.

When working in culturally diverse communities, disaster response mental health teams should consider the steps outlined below (see also, Box 6.3) (9):

- ◆ The team must first understand and respect the way in which each group copes with the emotions frequently seen in disasters (e.g., loss and grief). Knowledge of how the culture copes can be used to encourage those affected by a disaster to build on their innate coping skills and natural support network.
- ◆ Psychosocial interventions (e.g., support groups, educational materials, etc.) should be developed to complement those that already exist within the culture.
- ◆ When culturally sanctioned practices are identified that are believed to undermine the psychological well-being of the culture (e.g., the utilization of non-traditional healers to treat psychosis), the team should respectfully engage cultural leaders in a dialogue to share information on alternative methods of treatment.
- ◆ The mental health planning team needs to consult culture brokers (those who are entrenched in the community and culture and are in a position of authority) during every phase of disaster preparedness so that the mental health section of the emergency preparedness plan is culturally sensitive and has the agreement of all cultural groups.

Box 6.2**Summary points and assessment questions to be used during the disaster response phase****Factors influencing culture**

Historical events—What are the key historical events for the population?

Religion—Which religions are dominant and what are their practices?

Economic context—What is the economic situation for the country/regions/sub-regions?

Gender—What are the predominant gender roles for the country/regions/sub-regions?

Culture and perceptions of mental health/mental disorders

Beliefs—What are the predominant beliefs about mental health, mental disorders and mental health treatment? What are the beliefs as they relate to special groups, e.g., older persons, children and adolescents, the physically and mentally disabled?

Predominant practices—What is the history of mental health services in the population? How does the culture cope with emotional challenges?

Religion—What are the religious beliefs about mental health and mental disorders?

Culture and help-seeking behaviors

Practices—What are the ways in which the culture identifies mental health problems? What are the prevailing ways in which the culture addresses mental health problems?

Beliefs—What are the prevailing beliefs about seeking professional help for mental health problems?

Religion—What are the religious beliefs about seeking professional help for mental health problems?

Culture and psychological response to disaster

Practices—There may be varied responses by cultural groups to disaster. Caribbean people historically have been expressive but resilient in disaster situations.

Question—What are the sanctioned/normal response of the culture to disaster?

- ◆ An understanding of the help-seeking behaviors of the population is critical to the process of developing mental health services that the community will utilize during a disaster. The community's level of understanding about help-seeking behavior, their cultural strengths, and potential challenges can be assessed by initiating dialogue on the community's past experiences with disaster. For example, some cultures become very unified in disaster situations because of the strength of the extended family and community network, whereas others are less connected and function more on the individual level.
- ◆ Challenges with accessing mental health services should be identified and addressed in the emergency preparedness plan and possible solutions identified in consultation with the cultural groups.
- ◆ All of the mental health audiovisual material produced must be vetted for cultural sensitivity. Materials should also be produced that take into account the variation in the cultural groups (including linguistic), variations in education level and religion.

Box 6.3

Cultural competence summary points to be used during the disaster response phase

Identify and respect the cultural norms as they relate to coping with emergencies;

- Identify the natural resources of the culture;
- Work with cultural brokers to identify areas where external support is needed;
- Identify suitable mental health services for the needs of cultural groups;
- Work with religious leaders where requested and where collaborative work is appropriate;
- Provide materials (print, audiovisual, etc.) that are culturally and linguistically appropriate.

- ◆ First responders should receive continuous training on cultural competence. They should be well versed in the cultural issues specific to the community in which they are working.
- ◆ The mental health team must be willing to include and collaborate with (upon the request of their clients) religious leaders and non-traditional healers in patient management so long as they maintain the medical standard of care.
- ◆ The first steps in ensuring the psychological welfare of a community in a post-disaster situation are to provide for the basic human needs; cultural groups need to know how to access basic needs (food, water, shelter, and health care) in the various stages of a disaster. Disaster preparedness efforts should ensure that each cultural group is informed and has access to basic needs during and post-disaster.

Empowering communities after a disaster

- ◆ Developing active partnerships with the cultural groups within a society allows health professionals to empower communities and to develop culturally competent disaster preparedness plans (10). Mental health workers should consider the following points when working with communities (see also, Box 6.4).
- ◆ Empowerment occurs in part through knowledge (9, 10). Mental health workers first need to be educated about the community by its leaders and cultural brokers in the following areas: the structure and functioning of the community; family structure and gender roles; community priorities, strengths, and weaknesses; and past experiences with disasters.
- ◆ Each community group should be consulted and a disaster plan specific to the vulnerabilities of the community developed; the plan should identify the priorities of the community, current resources (human resources, health care facilities, etc.), and the projected need during a disaster. For example, in an impoverished neighborhood with poorly constructed houses, a plan to evacuate persons to the local churches and schools might be developed, allocating the responsibility for transportation to members of the community with vehicles. This will further facilitate a sense of organiza-

tion and control for the community members, both of which contribute to emotional stability.

- ◆ Tasks should be assigned to various members of the community. This might include accounting for disabled persons, maintaining a normal schedule of schooling and play for the children, volunteering to assist older persons and pregnant women to obtain food and water. The assignment of tasks can serve the dual purpose of keeping the caregiver occupied and distracted from worrying, and reducing the overwhelming feelings of helplessness and despair that may be experienced by those who require assistance.
- ◆ Vulnerable people within the community (e.g., pregnant women, children, older persons, persons with disabilities, the homeless, persons with severe persistent mental illness) should be identified with the assistance of cultural leaders. Specific plans should be developed for other community members to act as liaisons and to provide support to these persons following disasters.
- ◆ Shelter should be organized for displaced persons in a way that families and communities are housed together. This decreases the anxiety associated with loss and fear and facilitates the development of support groups between community members.
- ◆ Frequent community meetings should be held for community members following a disaster to provide practical and psychological support and to assess the community's ongoing needs.
- ◆ Frequent community meetings should be held between community representatives, government agencies, and nongovernmental organizations to determine how to access support for the community's ongoing needs.
- ◆ Community members need to be educated about maintaining good mental health in disaster situations, the normal psychological response to disaster in the pediatric and adult populations, the signs of mental disorders, and treatment resources which they can utilize. Members of the community should also be aware of interventions to minimize the psychological sequelae of disaster, for example, by joining support groups, maintaining routines (especially for children and adolescents), and respond-

Box 6.4

Empowering communities post-disaster: summary points

- Identify community leaders and involve them in the decision making process
- Build on the natural resources of the culture
- Improve the knowledge base of the community with regards to maintaining good mental health
- Allow the community to express their needs
- Assign key roles to members of the community
- Identify and attend to the needs of special groups (e.g., the mentally ill, physically ill, older and disabled persons, children, and pregnant women).

ing to externalizing behaviors displayed by children in a reassuring manner as opposed to corporal punishment.

- ◆ Encourage the resumption of cultural practices including rituals and religious practices around grief, loss, and burial of the deceased.

References

1. The Merriam Webster Dictionary website. www.merriam-webster.com.
2. Perilla, J. L., F.H. Norris. "Ethnicity, culture, and disaster response: identifying and explaining ethnic differences in PTSD six months after Hurricane Andrew." *J Soc Clin Psychol*. 2002; 21(1): 20–45.
3. Freimuth, V. "African American views on research and the Tuskegee Syphilis Study." *Soc Sci Med*. 2001;52(5): 797–808.
4. Ellis, P. *Women, gender and development in the Caribbean: reflections and projections*. London: Zed Books Ltd, 2003.
5. Corrigan, P. "How stigma interferes with mental health." *Am Psychol*. 2004; 59(7): 614–25.
6. Fox, J., E. Merwin, M. Blank. "De facto mental health services in the rural south." *J Health Care Poor Underserved*. 1995; 6(4):434–68.
7. Favazza, A. R. "Modern Christian healing of mental illness." *Am J Psychiatry*. 1982; 130:728–35.
8. Lubchansky, I., G. Egri, J. Stokes. "Puerto Rican spiritualist view mental illness: the faith healer as a paraprofessional." *Am J Psychiatry*. 1970; 127:312–21.
9. U.S. Department of Health and Human Services (DHHS), *Substance Abuse and Mental Health Services Administration. Developing cultural competence in disaster mental health programs: guiding principles and recommendations*. Rockville, MD: DHHS, 2003.
10. Inter-Agency Standing Committee (IASC). *IASC guidelines on mental health and psychosocial support in emergency settings*. Geneva: IASC, 2007. <http://tinyurl.com/r2mh4f>.

A photograph of an elderly woman with white hair, wearing a blue and gold patterned dress, sitting on a brown plastic chair. She is facing away from the camera. In the background, a wooden door is open, and two other elderly people are standing near it. One is wearing a white shirt and the other a pink shirt. The room has a patterned rug and a blue patterned object on the wall.

SECTION 2

Mental Health and Psychosocial Issues

Recognizing Normal Psychological Reactions to Disasters

Bena Labadee¹⁸
Eleanor Bennett¹⁹

Introduction

Typically, when someone is faced with the possibility of losing his/her life, loved ones, home and possessions, hopes, dreams and assumptions about life, there will be some degree of psychological impact. This is what usually occurs in the event of a disaster. Disasters of various types are common occurrences throughout the world and have a broad impact on individuals and communities. Despite that, most survivors are able to cope with the effects, rebuild their lives, and recover psychologically. In most cases, the passage of time will lead to the re-establishment of equilibrium. Fundamental to this process is access to public information about normal reactions, personal coping strategies, and when and where to seek help.

Factors influencing emotional reactions to disasters

Not all disasters are the same. Each disaster, whether a flood, earthquake, hurricane, or human-caused event, has unique elements. These elements have psychological implications for survivors and communities and the potential for shaping and influencing the nature, intensity, and duration of post-disaster distress. Following is an overview of these factors.

Origin of the disaster

If a disaster is caused by human actions, survivors tend to struggle with deliberate human-on-human violence or human error as causal agents. Recovery is hampered by blame and anger, evoked by the perception that the event was preventable and a sense of betrayal by a fellow human(s). Disasters caused by natural hazards are often perceived to be beyond human control. It is not uncommon for people to believe that disasters are retribution for evil beliefs or deeds (see Chapter 6); for some, accepting mass destruction as “an act of God” is easier, whereas for others it can be more difficult (1). However, disasters are increasingly recognized as failures of the development process. For example, the quality and level of enforcement of buildings codes is a major determining factor in a country’s resilience to natural disasters.

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Degree of personal impact

Research has consistently shown that the more personal exposure a survivor has to the disaster's impact, the greater his or her post-disaster reactions (2). Death of a family member, loss of one's home, and destruction of one's community can have a devastating impact on survivors. In each of these instances, the intertwining of the processes of grief and trauma compound the effects and extend the duration of the recovery period for many survivors (3). Survivors who experience tremendous loss experience more anxiety, depression, sadness, somatic symptoms, and, in some cases, alcohol abuse.

Size and scope of the disaster

It is highly likely that the greater the community devastation, the greater the psychological impact on the survivors. When entire communities are destroyed, everything familiar is gone. Survivors become disoriented and may experience high levels of anxiety, depression, somatic symptoms, and generalized distress associated with widespread community destruction (3). When some fabric of community life is left intact (e.g., schools, churches, commercial areas), there is a foundation upon which recovery can begin. Social support occurs and family roles resume more readily when community gathering places remain. Survivors are then more able to continue some of their familiar routines.

Probability of recurrence

When a disaster has a seasonal pattern, such as a hurricanes or tornado, survivors are concerned they will be hit again before the season ends. During the period between events, communities rebuild, vegetation grows back, and visual reminders of the disaster diminish. As the season comes around again, the reminder that the area is potentially at-risk may stir up feelings of anxiety and hyper vigilance may resurface. Earthquakes, volcanic eruptions, and floods that do not necessarily follow a seasonal pattern tend to make survivors anxious and preoccupied because the immediate probability of recurrence is perceived as high.

Characteristics of survivors

Each survivor experiences the disaster through his or her own lens. Factors such as the meaning assigned to the disaster, personality type, inherent personality, coping skills, world view, and spiritual beliefs contribute to how that person perceives, copes with, and recovers from the disaster. Experiences with losses or disasters may enhance or may compromise coping. Resilience factors include the ability to tolerate and cope with disruption and loss; while vulnerability factors include



preexisting health or emotional problems and additional concurrent stressful life events (4). In addition, cultural experience and ethnic background may facilitate or interfere with a survivor's ability to engage with disaster relief efforts.

Typical reactions to disasters

It is commonly assumed that the devastation associated with some disasters may cause pathological conditions such as acute stress disorder and post-traumatic stress disorder (PTSD). The truth is, however, that for the majority of survivors, mild to moderate distress reaction is the most common occurrence. Distress reaction is transitory and commonly regarded as a normal response to an abnormal event. Survivors also react with grief to the loss of loved ones, homes, and possessions. Poor concentration, withdrawal, and depressed mood characterize grief reactions and are common and normal. Grief and stress response in the disaster aftermath are natural and adaptive, and should not be labeled pathological unless it is prolonged, blocked, exceeds a tolerable quality, or interferes with regular functioning to a significant extent. It is important to remember that the average person is "normal" before and after the event and therefore mental health labels must be avoided when inappropriate.

Table 7.1 presents common distress reactions to disasters, categorized into emotional, physical, cognitive, and interpersonal effects (see Table 7.1).

Table 7.1 Common disaster-related stress reactions

Emotional reactions	Cognitive reactions	Physical reactions	Interpersonal reactions
<ul style="list-style-type: none"> • Fear • Grief • Anger • Guilt • Feeling depressed or sad • Feeling despair or hopelessness • Resentment • Helplessness • Emotional numbness • Feeling overwhelmed 	<ul style="list-style-type: none"> • Trouble concentrating or remembering things • Confusion • Difficulty making decisions • Preoccupation with the event • Recurring dreams or nightmares • Questioning spiritual beliefs • Attention span • Memory problems • Self-blame 	<ul style="list-style-type: none"> • Tension • Fatigue • Restlessness • Sleep disturbances • Bodily aches and pains • Increase or decrease in appetite • Hypertension, heart pounding • Racing heartbeat • Nausea • Quick startle response • Headaches 	<ul style="list-style-type: none"> • Feeling more distrustful • Irritability • Sleep problems • Crying easily • Increased conflicts with family • Withdrawal from others • Feeling rejected and abandoned by others • Being judgmental; being over-controlling

Source: Adapted from New South Wales (NSW) Health, .Disaster mental health response handbook, North Sydney, NSW: NSW Health, 2000.

Typical reactions to disasters by age group

Children, adolescents, adults, and older persons may share common patterns or ways of reacting to a disaster.

Table 7.2 Common reactions in the post-disaster phase, by age group

Common reactions of children	Common reactions of adolescents	Common reactions of adults	Common reactions of older adults
<ul style="list-style-type: none"> • Fearful of new situations • Separation anxiety • Fear of the darkness or animals • Clinging to parents • Baby talk • Loss of bladder or bowel control, constipation • Speech difficulties (e.g., stammering) • Loss or increase of appetite • Become passive and quiet • Thumb-sucking • Irritability • Aggressive behavior at home or school • Competition with younger siblings for parental attention • Night terrors, nightmares, fear of darkness • School avoidance • Withdrawal from peers • Loss of interest; poor concentration and attention in school • Headaches or other physical complaints • Fears about weather, safety, recurrence • Thinks about many frightening moments during and after the events 	<ul style="list-style-type: none"> • Sleep disturbance • Appetite disturbance • Rebellion in the home • School problems (e.g., fighting, withdrawal, loss of interest, attention-seeking behaviors) • Physical problems (e.g., headaches, vague pains, skin eruptions, bowel problems, psychosomatic complaints) • Loss of interest in peer social activities • Poor performance • Withdrawal and personal isolation, extreme avoidant behavior • Changes in peer group or friends • Agitation or decrease in energy level • Irresponsible and/or delinquent behavior • Use of alcohol and drugs 	<ul style="list-style-type: none"> • Sleep problems • Avoidance of reminders • Excessive activity level • Crying easily • Increased conflicts with family • Hyper vigilance • Isolation, withdrawal • Fatigue, exhaustion • Gastrointestinal distress • Appetite change • Somatic complaints • Worsening of chronic conditions • Depression, sadness • Irritability, anger • Anxiety, fear • Despair, hopelessness • Guilt, self doubt • Mood swings 	<ul style="list-style-type: none"> • Depression, withdrawal, apathy • Decline in physical health with an increase in physical complaints • Disorientation, confusion, and memory losses. • Agitation, impatience, anger, and irritability • Appetite and sleep disturbances • Reluctance to leave home • Relocation adjustment problems • Worsening of chronic illnesses • Sleep disorders • Somatic symptoms • Multiple medication needs • Despair about losses • Apathy • Suspicion • Anxiety with unfamiliar surroundings • Embarrassment about receiving “hand outs”

Source: Adapted from New South Wales (NSW) Health. Disaster mental health response handbook, North Sydney, NSW: NSW Health, 2000.

Children

Children experience a variety of reactions and feelings in response to a traumatic event or a disaster and require special attention to meet their needs (see Table 7.2). Children may exhibit behaviors that are not typical for them. For example, an outgoing child may become

shy or may revert to a past behavior such as thumb-sucking or baby talk. Since many children lack the verbal and conceptual skills needed to cope effectively with sudden stress, the reactions of their parents and families strongly affect them. In most cases the symptoms will pass after the child has readjusted. When symptoms do continue, it means a more serious emotional problem has developed and the child will need to be referred to a mental health professional (see Chapters 9 and 12 for more information).

Adolescents

Peer reactions are especially significant in this age group (see Table 7.2). The adolescent needs to know that his/her fears are both appropriate and shared by others. A disaster may stimulate fear concerning the loss of their family or fear related to their body. The family's need to pull together threatens their natural branching away from the. Disasters disrupt their peer relationships and school life. As children get older, their responses begin to resemble adult reactions to disasters. They may also have a combination of childlike reactions mixed with adult responses. Teenagers may show more risk-taking behaviors than normal (reckless driving, use of drugs, etc.). Teens may feel overwhelmed by their emotions, and may be unable to discuss them with their families (see Chapters 9 and 12 for more information).

Adults

Adults are focused on family, home, jobs, and financial security. Many are involved with caring for older parents as well. Pre-disaster life often involves maintaining a precarious balance between competing demands. Following a disaster, this balance is lost, with the introduction of the enormous time, financial, physical, and emotional demands of recovery. Somatic reactions are especially present in those who are less able to experience and express their emotions directly (Table 7.2). Cultural, gender-based, or psychological factors may interfere with emotional expression and seeking social support. Anxiety and depression are common, as adults contend with both anxiety about future threats and grief about the loss of home, lifestyle, or community.

Older adults

The impact of disaster-related losses has shown that a higher incidence of personal loss, injury and death are experienced by older adults (Table 7. 2). In addition, existing problems with sight, hearing and mobility all place older adults at higher risk for physical injury. Research has also shown that older adults are less likely to evacuate, less likely to heed warnings, less likely to acknowledge hazards and dangerous situations,



and are much slower to respond to the full impact of losses. A larger proportion of older persons, as compared with younger age groups, have chronic illnesses that may worsen with the stress of a disaster, particularly when recovery extends over months. They are more likely to be taking medications that need to be replaced quickly following a disaster. Reactions of older adults to disasters are summarized in the table below (see Chapters 9 and 12 for more information).

Conclusions

The emotions and reactions that follow a disaster are normal and natural responses to a stressful event. For most people, these reactions are temporary and generally do not become chronic problems. Individual responses will differ and progress at different paces throughout the process. It is important for survivors to recognize that these reactions are expected and that everyone will experience them in some form and intensity.

References

1. Yates, S. "Attributions about the causes and consequences of cataclysmic events." *Journal of Personal and Interpersonal Loss*. 1998; 3(1):7–24.
2. Solomon, S.D., B. L. Green, "Mental health effects of natural and human-made disasters." *PTSD Research Quarterly*. 1992; 3(1): 1–8.
3. Kohn, R., I. Levav. "Bereavement in disaster: an overview of the research." *Int J Ment Health*. 1990; 19(2): 61–76.
4. McFarlane, A.C., L. Weisaeth (Eds.), *Traumatic stress: the effects of overwhelming experience on mind, body and society*. New York: Guilford Press; 1996.
5. New South Wales (NSW) Health, *Disaster mental health response handbook*. North Sydney, NSW: NWS Health, 2000.
6. Raphael, B. *When disaster strikes: how individuals and communities cope with catastrophe*. New York: Basic Books, 1986.

In the immediate aftermath of a major disaster, emphasis is understandably on basic needs such as food, water, shelter, and medical care for those who may have been physically injured. After a disaster that has caused infrastructure damage, important considerations must be addressed, including re-establishing communications and ensuring that there is reliable damage assessment. It is not unusual for mental health to be absent among the list of high priorities that need to be addressed. In fact, many countries' disaster plans, particularly those of developing countries, may not have a mental health component.

Range of reactions to disasters

The psychological reactions of individuals in a population affected by a disaster can vary in intensity and a wide range of psychological reactions are usually seen, ranging from very mild and very transient to the more severe and long-lasting reactions that may last for years. The initial reactions, which occur immediately after the event, are widespread and unstable. Acute reactions may include symptoms of anxiety and depression and for most of the population will not be long lasting (see Chapter 7, Normal Psychological Reactions to Disasters).

It is important to remember that not only those who have experienced trauma first-hand display reactions. However, those who are involved in rescue efforts may also display reactions to the trauma, having been secondarily exposed to the event (see Chapter 12).

In general, it may be helpful to think of the possible reactions under the three headings below, rather than to label individuals as suffering from a specific mental health problem or psychological disorder:

- ◆ The expected/usual psychological reactions to a disaster;
- ◆ Exaggerated, prolonged unusual or severe reactions to a disaster;
- ◆ Reactions that put the individual or other members of the community at risk. Among the group of individuals with this type of reaction there are likely to be persons who have had previous mental health problems, as well as persons who have had no prior history of mental illness (see Chapter 9).

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Labeling a person as suffering from a mental illness still carries significant stigma and may be associated with ostracism and social exclusion. Care must be taken not to subject individuals unnecessarily to these consequences. On the other hand, every effort must be made to educate members of the society about mental illness and the need to ensure early detection and intervention so that affected individuals receive the necessary care, minimizing suffering and marginalization, and are able to return as functional members of their community.



In many communities/countries of the region there still exists significant stigma associated with mental illness. Persons who suffer from mental health problems are often not seen as being genuinely ill. They are less likely to be regarded as experiencing real suffering (in the sense that persons who have had physical injuries or physical illnesses are). It is often more likely that they will be made fun of, ridiculed, or regarded as weak. In some instances they are also regarded as potentially violent and unpredictable.

Importantly, in many individuals somatic (physical) complaints such as headache, muscular pain, assorted aches, and fatigue may occur in addition to emotional and psychological complaints. At times these physical or somatic complaints may not be recognized as reactions associated with the disaster. It should also be noted that in some cultures it may be more acceptable to experience and report these physical complaints rather than complain of psychological or emotional reactions. So it is very important for those persons assisting after a disaster to have knowledge about the culture and the attitudes of the population regarding psychological and emotional complaints (see Chapter 6).

Clues that help identify the presence of severe mental disorder

Some reactions in the aftermath of a disaster are a cause for concern when it comes to the well-being of individuals who display them and signal a need for appropriate evaluation and interventions (9). These reactions include:

- ◆ Inability to look after his/her own basic needs
- ◆ Inability to look after young children he/she is responsible for
- ◆ Delusions
- ◆ Hallucinations
- ◆ Suicidal thoughts
- ◆ Homicidal thoughts
- ◆ Prolonged and excessive use of mind-altering substances, including alcohol
- ◆ Violent and aggressive behavior

Delusions or delusional thoughts may be an indication that the person who is expressing them suffers from a psychosis. A psychosis is a mental illness in which the individual has lost contact with reality. This type of mental illness may place the individual at risk for causing harm to others or becoming involved in altercations or physical conflict, thus sustaining an injury. However, a relatively small percentage of persons who suffer from psychosis are violent.

Anyone who complains about being suicidal or speaks about not wanting to live should be given additional support and carefully evaluated by a mental health professional or a person with the skills and experience to provide the necessary assistance. Any individual who consistently behaves in an erratic manner or voices intent to harm other persons should be carefully evaluated.

Two short vignettes, based on actual events, serve to demonstrate the range of reactions to a disaster (see Box 8.1). The first is of a woman who has experienced a hurricane. Her reactions are considered to be in the “normal” range (it should be noted that recovery occurred within a matter of weeks and psychological treatment was not necessary). The second is of a man who lost his means of livelihood during a major storm. He experienced a number of severe reactions, which together satisfied the criteria for the diagnosis of a depressive illness. The individual received treatment and the problems eventually resolved.

Box 8.1

Examples of persons exhibiting ranges of reactions to natural disaster

Case 1

Angelique was terrified during the hurricane. The island suffered a direct hit from Hurricane Frances. Angelique had taken her two small children to the shelter several hours before the hurricane. During the ordeal she could hear the howling of the wind and horrendous noises outside the shelter, as various structures in the surrounding area were blown away or damaged.

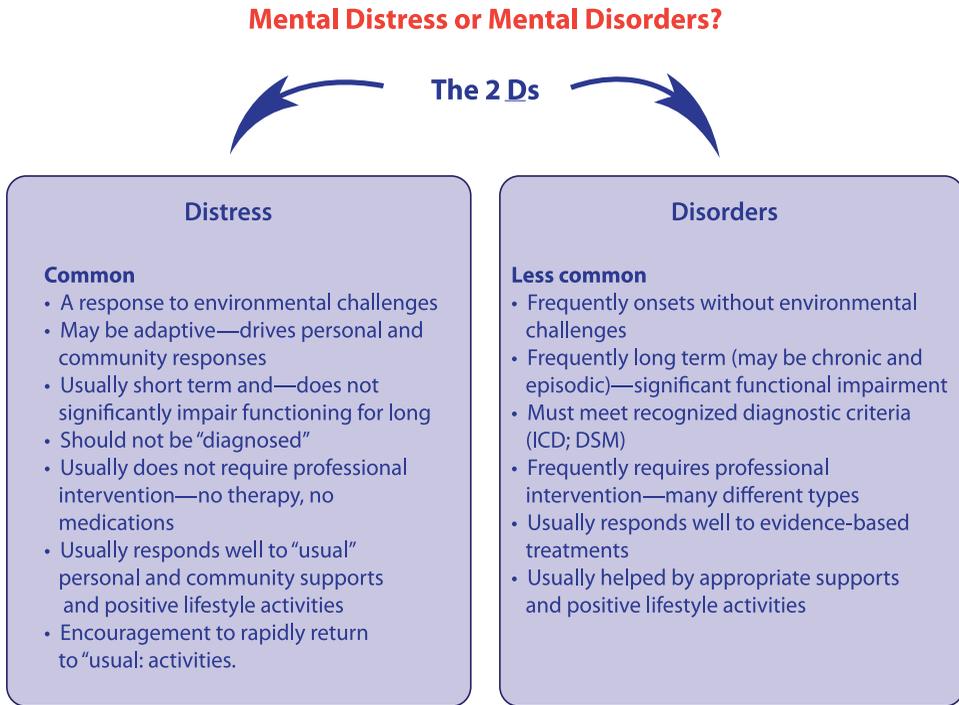
When the hurricane finally passed, she returned to find that her house had suffered very little physical damage. Over the next two weeks she had difficulty sleeping, felt listless, had poor appetite, and experienced terrifying dreams in which she re-experienced the hurricane. At times she felt nervous, especially when the sky became darkly clouded and it seemed as if it were getting ready to rain. Somehow this reminded her of the hours before the hurricane. One month afterward she still felt a little anxious when she recalled the experience but was sleeping well and was managing to get on with her usual activities.

Case 2

Tony had been very upset after learning that his fishing boat had been washed away by the storm. He was angry. He felt lost and wondered how he would now earn a living. He had been a fisherman ever since leaving school. He started drinking much more than usual and spent most of the day in the little bar near the waterfront. He seemed despondent and, despite efforts from his friends to cheer him up, grew more despondent daily.

Tony's wife told the doctor that she was very concerned about him. He had stopped being his usual cheerful self and constantly talked about having very little reason to continue living. It was now more than a month since the boat had been lost. He had been irritable, continued to drink far more than was customary and had lost weight. He had lost interest in most things and wore a sad and dejected look. Of major concern for his wife was his talk about death: he even told her what he wanted done at his funeral. Tony was eventually evaluated and treated for a depressive illness. He received antidepressant medication and counselling sessions and his symptoms eventually resolved.

Figure 8.1 Mental distress or mental disorder?



Source: S. Kutcher, Dalhousie University, Nova Scotia, Canada.

Figure 8.1 illustrates important differences between reactions that can occur as a result of exposure to a disaster and symptoms that are indicative of the presence of mental illness or mental disorders.

Acute stress reactions

For many individuals the experience of a disaster results in feelings of anxiety and emotional distress, which usually resolve within a few weeks. These reactions may involve sadness or low mood, fear and worry, and for some persons, preoccupation with bodily symptoms may also be significant. In a number of individuals, the reactions may progress and evolve into full blown post-traumatic stress disorder, generalized anxiety, or depressive illness. For most individuals, however, these reactions usually resolve without need of treatment.

In most cases it may be enough to offer simple support and encourage individuals to resume their usual routines, not take medications to treat anxiety, and avoid the use of alcohol or other drugs to help with their symptoms of anxiety or to alleviate sadness or low mood. Individuals should also be encouraged to identify those resources within the community such as relatives, friends, and spiritual leaders for support.

Psychological first aid (described in Chapter 11) should be made available to everyone in the immediate post-disaster period. For individuals who continue to have problems beyond

three to four weeks, help within the primary care setting should be offered (10). Those individuals should, in the first instance, be assessed by the primary care physician.

As part of the Mental Health Gap Action Program, WHO has published an intervention guide to assist health workers in a variety of settings to detect and manage mental, neurological, and substance abuse disorders (see Box 8.2). While not geared specifically to disaster situations, it offers the tools to address psychosocial support and community-based mental health services which can be provided in situations where mental health care services may have been disrupted or are not available.

Box 8.2

Guide for detecting mental, neurological and substance abuse disorders: the WHO - Mental Health Gap Action Program

The mhGAP Intervention Guide (mhGAP-IG) is a simple tool to help detect, diagnose, and manage the most common mental, neurological, and substance use disorders and is aimed at helping a range of people from doctors and nurses to assistants in a variety of resource settings.

The mhGAP-IG includes evidence-based recommendations to manage priority conditions including depression, epilepsy, psychosis, bipolar disorders, developmental and behavioral disorders in children and adolescents, dementia, alcohol use disorders, drug use disorders, self-harm/suicide, and other significant emotional or medically unexplained complaints. The Guide emphasizes the importance of psychosocial interventions in managing these conditions. It also provides advice on medicines, when to use them or not, and covers interventions with a basic approach that uses easy-to-follow flowcharts.

Information available from: http://www.who.int/mental_health/mhgap/en/.

Criteria for the diagnosis of depressive illness

While a number of mental health problems can occur in persons who have experienced a disaster, depressive illness may be one of the more common. This is a serious illness. According to the Diagnostic and Statistical Manual (DSM-IV) of the American Psychiatric Association, symptoms must be present for at least two weeks, for most of the day, every day or nearly every day and specific criteria must be met before the diagnosis can be made (11).

Five (or more) of the following symptoms must have been present during the same two-week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.

- ◆ Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels “sad” or “empty”) or observation made by others (e.g. “appears tearful”). In children and adolescents, this can be an irritable mood;
- ◆ Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation made by others);
- ◆ Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), decrease or increase in appetite nearly every day. In children, consider failure to make expected weight gains;

- ◆ Insomnia or hypersomnia nearly every day (inability to sleep or excessive sleeping);
- ◆ Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down); Fatigue or loss of energy nearly every day;
- ◆ Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick);
- ◆ Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others);
- ◆ Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.



The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Many persons who have experienced a disaster may have periods of despondency and depressed mood, which may be an expected reaction to the disaster (6, 7). It is when the depressed mood or feelings of emptiness or an inability to experience enjoyment or pleasure persist that the possibility of a depressive illness must be considered and the individual should be properly evaluated.

Depression is a very serious mental health problem; it is much more than a brief period of unhappiness. Some individuals suffering from this illness may experience suicidal thoughts and may act upon these thoughts. It is extremely important that these persons receive appropriate care leading to recovery and that they receive follow-up care, since relapse and further episodes of depression can occur in some individuals.

It must be recognized that after a period of a month or so, most of the usual reactions that persons may have experienced after a disaster begin to resolve or to show some degree of improvement. Any reactions that continue beyond four to six weeks without signs of improvement or resolution may indicate that the individual needs assistance.

Post-traumatic stress disorder

Post-traumatic stress disorder (PTSD) has been identified as a disorder that has an increased incidence in persons who have experienced a disaster (DSM-IV-TR). Diagnostic criteria for PTSD include a history of exposure to a traumatic event and symptoms from each of three symptom clusters (i.e., intrusive recollections, avoidant/numbing symptoms, and hyper-arousal symptoms). Another criterion concerns duration of symptoms, and a sixth assesses functioning.

Criterion 1: Stressor

The person has been exposed to a traumatic event in which both of the following have been present:

- ◆ The person has experienced, witnessed, or been confronted with an event or events that involve actual or threatened death or serious injury, or a threat to the physical integrity of oneself or others;
- ◆ The person's response involved intense fear, helplessness, or horror. In children, this may be expressed instead by disorganized or agitated behavior.

Criterion 2: Intrusive recollection

The traumatic event is persistently re-experienced in at least one of the following ways:

- ◆ Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. Note that in young children, repetitive play may occur in which themes or aspects of the trauma are expressed;
- ◆ Recurrent distressing dreams of the event. In children, there may be frightening dreams without recognizable content;
- ◆ Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur upon awakening or when intoxicated). In children, trauma-specific re-enactment may occur;
- ◆ Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event;
- ◆ Physiologic reactivity upon exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.

Criterion 3: Avoidant/numbing

Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by at least three of the following:

- ◆ Efforts to avoid thoughts, feelings, or conversations associated with the trauma;
- ◆ Efforts to avoid activities, places, or people that arouse recollections of the trauma;
- ◆ Inability to recall an important aspect of the trauma;
- ◆ Markedly diminished interest or participation in significant activities;
- ◆ Feeling of detachment or estrangement from others;
- ◆ Restricted range of affect (e.g., unable to have loving feelings);
- ◆ Sense of foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span).

Criterion 4: Hyper-arousal

Persistent symptoms of increasing arousal (not present before the trauma), indicated by at least two of the following:

- ◆ Difficulty falling or staying asleep;
- ◆ Irritability or outbursts of anger;
- ◆ Difficulty concentrating;
- ◆ Hyper-vigilance;
- ◆ Exaggerated startle response.

Criterion 5: Duration

The duration of the disturbance is more than one month.

Criterion 6: Functional significance

The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning. It is acute if duration of symptoms is less than three months; it is chronic if duration of symptoms is three months or more. With or without delayed onset, symptoms can occur at least six months after the stressor

Psychotic illness

A psychotic illness is a mental illness in which the symptoms are such that the individual loses contact with reality because of the occurrence of delusional thoughts (false beliefs or false ideas) and hallucinations (false perceptions). These kinds of illness are not commonly a consequence of a disaster but may recur in persons who have previously suffered from psychosis. Certainly, individuals who have been in treatment for psychosis are likely to suffer a relapse in the aftermath of a disaster when they are unable to obtain the medications with which they were being treated. In some cases the stress of the disaster may result in relapse (see Chapter 9).

Summary

- ◆ Psychological reactions to a disaster or traumatic event are expected and may affect the survivors as well as those who are involved in providing assistance.
- ◆ There are a wide range of usual reactions and these should not be considered as symptoms indicative of mental illness or mental disorder.
- ◆ Personality, culture, and traditions have an effect in determining the types of reactions people are likely to exhibit following a disaster.
- ◆ The intensity of reactions to a disaster is also affected by the extent of the loss suffered.

- ◆ The very young and the very old may display reactions that are different from those of mature adults.
- ◆ Caution should be exercised and care taken not to label individuals prematurely as suffering from a mental illness.
- ◆ Care should also be taken to ensure that persons who are experiencing symptoms of mental illness receive the care and attention that will result in the control of their symptoms and relief of their suffering while being treated with dignity.
- ◆ Indications that individuals experience delusional thinking, have suicidal ideas, behave in a violently aggressive manner, engage in behavior likely to cause injury to themselves or others, or are unable to care for themselves may signal the presence of a mental illness.
- ◆ Specific diagnostic criteria must be used when diagnosing any mental illness.
- ◆ Treatment should be initiated by those professionals with the appropriate training and experience.

Conclusion

Disasters may result in widespread psychological distress in the population experiencing the disaster. The reactions may vary from very mild and transient to severe and long lasting. For the majority of individuals these reactions resolve over time and most people regain their sense of equilibrium and return to functioning as productive members of their communities within a matter of weeks.

A small percentage of persons exposed to the disaster are likely to experience sustained, severe reactions. Some of these individuals may have previously suffered mental health problems. Anxiety disorders, post-traumatic stress disorders, and depressive illness are among the more common mental health problems that may occur in the aftermath of a disaster, and they can affect adults, children and older persons. Substance abuse problems can also occur in the post-disaster period.

When a mental illness is suspected the individual should be carefully evaluated and treatment provided by an experienced health care professional. It is important not to label individuals as suffering from mental illness when they are experiencing reactions that are common among persons following a disaster. On the other hand, assistance and appropriate treatment must be provided for individuals suffering from serious mental illness.

References

1. Davidson, J.R.T., A.C. McFarlane. "The extent and impact of mental health problems after disaster." *J Clin Psychiatry*. 2006; 67(suppl 2):9–14.
2. Ghodse, H., S. Galaea. "Tsunami: understanding mental health consequences and the unprecedented response." *Int Rev Psychiatry*. 2006;18(3): 289–97.

3. Briere, J., D. Elliott. "Prevalence, characteristics and long-term sequelae of natural disaster exposure in the general population." *J Trauma Stress*. 2000; 13(4):661–79.
4. Cohen, R. E. "Post-disaster mobilization and crisis counseling: guidelines and techniques for developing crisis-oriented services for disaster victims." In: Pan American Health Organization, *Mental health services in disasters: manual for humanitarian workers*. Washington, D.C: PAHO/WHO; 2000.
5. Green, B.L. "Psychological responses to disasters: conceptualization and identification of high risk survivors." *Psychiatry Clin Neurosci*. 1998; 52(s5): s67–s73.
6. Norris, F.H., M.J. Friedman, P.J. Watson, C.M. Byrne, E. Diaz, K. Kaniasty. "60,000 disaster victims speak. Part I. An empirical review of the empirical literature, 1981–2001." *Psychiatry, Interpersonal and Biological Processes*. 2002; 65:207–39.
7. Norris, F.H. et al. "60,000 disaster victims speak: Part II. Summary and implications of the disaster mental health research." *Psychiatry, Interpersonal and Biological Processes*. 2002; 65: 240–60.
8. Ursano, R.J., C.S. Fullerton, A.Terhakopian. "Disasters and health: distress, disasters and disaster behaviors in communities, neighborhoods and nations." *Social Research*. 2008; 75(3):1015–28.
9. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA), *Field manual for mental health and human service workers in major disasters*. Washington, D.C.: SAMSHA, 2000.
10. Van Ommeren, M., S. Saxena, B. Saraceno. "Aid after disasters." *BMJ*. 2005; 330(7501): 1160–61. doi: 10.1136/bmj.330.7501.1160.
11. American Psychiatric Association (APA). (2005). *Diagnostic and statistical manual of mental disorders* (Revised 4th ed.). Washington, D.C.: APA.

Support for Vulnerable Groups Following a Disaster

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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.

Box 9.2

Recommendations for institutionalized persons with mental disorders

- Ensure that at least one agency involved in health care accepts responsibility for ongoing care and protection of people in psychiatric institutions.
- If staff has abandoned psychiatric institutions, mobilize human resources from the community and the health system to care for people with severe mental disorders.
- Provide basic training and supervision for those mobilized to provide care.
- When the condition of the patient allows, care should be provided outside of an institution.
- Protect the lives and dignity of people living in psychiatric institutions, ensuring that patients' basic physical needs are met.
- Monitor the overall health status of patients and implement or strengthen surveillance of their human rights.

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 (7). 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 (8).

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 (see Chapter

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.



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.

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.

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



Box 9.5**Gender-based issues that can become evident following a disaster (22)**

- Women giving birth in unsafe conditions.
- Malnourished infants because their malnourished mothers cannot breastfeed them.
- Sexual abuse of women because there are no protective measures; lack of separate toilets and bathrooms in camps and temporary shelters.
- Women-headed households unable to restore their livelihoods because employment generation assistance focuses on areas that predominantly employ men.
- Women-headed households unable to access food and other supplies due to restrictions on their freedom of movement or physical barriers to reaching supply locations.
- The need for additional reproductive and child health care as well as psychosocial counseling since who give birth in the immediate aftermath are more vulnerable due to stress experienced during the disaster.

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).

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

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 heighten 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.



Box 9.10

Recommendations for planning and managing temporary shelters in the aftermath of a disaster (4, 34)

- Use a participatory approach that engages women and other at-risk segments of the population in the assessment, planning, and management of temporary shelters.
- Select sites that protect security and minimize conflict with permanent residents.
- Include communal safe spaces when designing and establishing sites.
- Develop and use an effective system to document and register residents of the shelter.
- Provide shelter and allocate land in a non-discriminatory manner.
- Maximize privacy, ease of movement, and social support.
- Balance flexibility and protection when organizing shelter and site arrangements.
- Avoid creating a culture of dependency among displaced people and promote durable solutions.
- Provide training (psychological first aid and information about common problems to be encountered) to health and community workers in shelters.
- Ensure routine visits from specialized personnel to shelters. Special attention should be given to children and other vulnerable groups which may present psychosocial issues.
- Promote group activities (recreational, cultural, sports) for children and youth.
- Facilitate creation of self-help groups.
- Support the return to normal work and school activities as soon as possible for adults and children.

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

1. World Health Organization. *Environmental health in emergencies and disasters* [Internet]. 2003 Available from: <http://tinyurl.com/886slz3>.
2. World Health Organization. *Public health risk assessment and interventions. Earthquake: Haiti*. Report No. WHO/HSE/GAR/DCE/2010.1. Geneva: WHO, 2010. <http://tinyurl.com/6tvuun7>.
3. World Health Organization. *World health statistics*. [Internet]. 2006 [cited June 10, 2010]. Available from: <http://www.who.int/whosis/whostat2006.pdf>.

4. Inter-Agency Standing Committee (IASC). *IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings*. Geneva: IASC, 2007. <http://tinyurl.com/r2mh4f>.
5. Jones L., J.B. Asare, M. El Masri, A. Mohanraj, H. Sherief, M. van Ommeren. "Severe mental disorders in complex emergencies." *Lancet*. 2009; 374(9690): 654–61.
6. Saraceno, B., M. van Ommeren, R. Batniji, et al. "Global Mental Health 5: Barriers to improvement of mental health services in low-income and middle-income countries." *Lancet*. 2007; 370: 1164–74.
7. Hussain A., L. Weisaeth, T. Heir. "Psychiatric disorders and functional impairment among disaster victims after exposure to a natural disaster: a population based study." *Journal of Affective Disorders*, 2010; 33(3): 353–68.
8. SAMHSA Work Group on Disasters, American Academy of Pediatrics. *Psychosocial issues for children and families in disasters: a guide for the primary care physician*. Rockville, MD: Substance Abuse and Mental Health Services Administration Report No. SMA95-3022 (1994). <http://tinyurl.com/84bgc27>.
9. Kar, N., B.K. Bastia. "Post-traumatic stress disorder, depression and generalized anxiety disorder in adolescents after a natural disaster: a study of comorbidity." *Clinical Practice and Epidemiology on Mental Health*. 2006; 2(17): 17.
10. McLaughlin K., J.A. Fairbank, M.J. Gruber, et al. "Serious emotional disturbance among youths exposed to Hurricane Katrina 2 years post disaster." *Journal of the American Academy of Child and Adolescent Psychiatry*. 2009; 48(11):1069–78.
11. Lilienfeld, S. O. "Psychological treatments that cause harm." *Perspectives in Psychological Science*. 2007; 2(1):53–70.
12. Green B.L., M. Korol, M.C. Grace, M.G. Vary, et al. "Children and disaster: age, gender, and parental effects on PTSD symptoms." *J Am Acad Child Adolesc Psychiatry*. 1991; 30(6):945–51.
13. Cooper, J.L., R. Masi. *Child and youth emergency mental health care*. New York: National Center for Children in Poverty, 2007. Available from: <http://preview.tinyurl.com/2dpfkmg> American Psychiatric Association. *Children and trauma: tips for mental health professionals*. 2005. Available from: <http://tinyurl.com/yl8p4r4>.
14. World Health Organization (WHO). *General considerations in disaster preparedness*. Geneva: WHO, 2005. 8 p.
15. Piers, B., T. Cannon, I. Davis, B. Wisner. *At risk: natural hazards, people's vulnerability, and disasters*. London: Routledge; 1994.
16. Delaney, P.L., E. Shrader. *Gender and post-disaster reconstruction: the case of Hurricane Mitch in Honduras and Nicaragua*. Washington, D.C.: The World Bank. 2000. <http://tinyurl.com/82l62lw>.
17. St. Bernard, G. *Major trends affecting families in Central America and the Caribbean*. Trinidad and Tobago: University of the West Indies; 2003.

18. Green M., M.C. Korol, M. G. Grace, B.L Vary. "Children and disaster: age, gender, and parental effects on PTSD symptoms." *J Amer Psycho Assoc.* 1991; 30(6):945–51.
19. Babwah, F , S. Baksh, L. Blake , A. Sookhai , C. Poon-King , Hutchinson. "The role of gender in compliance and attendance at an outpatient clinic." *Pan American Journal of Public Health.* 2006; 19(2): (0)79–84. <http://tinyurl.com/7d9lcjb>.
20. Palmer C.A., A.B. Zwi. "Women, health and humanitarian aid in conflict." *Disasters.* London: London School of Hygiene and Tropical Medicine; 1998.
21. Gomez, S. *Guidelines for gender sensitive disaster management.* Asia Pacific Forum on Women, Law and Development (APWLD) [Internet]. 2006. Available from: http://www.apwld.org/pdf/Gender_Sensitive.pdf.
22. Lee, M. *CDC's disaster planning goal: protect vulnerable older adults.* 2007 [Internet]. Available from <http://tinyurl.com/6r25zq8>.
23. Norris F.H., K. Sherrieb, S. Galea. "Prevalence and consequences of disaster-related illness and injury from hurricane Ike." *Rehabil Psychol.* 2010; 55(3):221–30.
24. Isaacson-Kailes, J. *Emergency evacuation preparedness: taking responsibility for your safety; tips for people with disabilities and activity limitations.* Pomona, California: Centre for Disability Issues and the Health Professions. 2002. 44 p.
25. Lee, M. *Improving services and support for older people with mental health problems* [Internet]. 2007. Available from <http://tinyurl.com/7bo2et5>.
26. Edgington, S. *Disaster planning for people experiencing homelessness.* National Health Care for Homeless Council. March, 2009. Available from: <http://www.nhchc.org/DisasterPlanning.pdf>.
27. U.N. International Strategy for Disaster Reduction (ISDR). "World Conference on Disaster Reduction." Paper presented at Kobe, Hyogo, Japan; 2005.
28. Incayawar M. *Indigenous peoples of South America –inequalities in mental health care.* London; 2007. 6 p.
29. Kirmayer, L.C, M.E. Macdonald, G.M. Brass. "The mental health of indigenous peoples." McGill Summer Program in Social & Cultural Psychiatric and the Aboriginal Mental Health Research Team. 2001.
30. Kirmayer, L, C. Simpson, M. Cargo. "Healing traditions: culture, community and mental health promotion with Canadian Aboriginal peoples." *Australian Psych.* 2003;11.
31. Fire and Emergency Services Authority and Kimberley Language Resource Centre. *Indigenous translation of Western Australian emergency management guidelines and the emergency management arrangements.* Perth, Australia: FESA; 2008.
32. Northern Health Authority (NHA). *Aboriginal health services plan.* Canada: NHA, 2010.
33. Organización Panamericana de la Salud (OPS). *Apoyo psicosocial en emergencias y desastres.* Washington, D.C.: PAHO/WHO, 2010. <http://tinyurl.com/6ujpk6z>.

Post-Disaster Psychotropic First Aid Kit

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Introduction

People experiencing normal distress do not require special mental health interventions; instead, they need shelter, food, water, and safety as well as the rapid resolution of problems associated with the disaster (1). It is essential not to pathologize normal stress/emotional responses to disaster and not to provide specific mental health interventions that may not be helpful or that indeed may be harmful (e.g., psychological debriefing) (2).

As discussed in Chapter 9, psychiatric patients are potentially very vulnerable in disaster situations and may require special assistance following an event (5).

During a disaster or immediately afterwards, there may be lack of professional help (i.e., family doctors or physicians, nurses, counselors, psychologists, and psychiatrists) to assist individuals requiring treatment for mental disorders. Many Caribbean countries have an inadequate capacity to meet mental health needs under normal conditions; a disaster can severely overburden these resources. (5, 6). It is essential that available resources be directed to the areas of greatest need: people with pre-existing mental disorders, those showing substantial signs/symptoms of mental illness and other groups considered vulnerable (as identified in Chapter 9). There is some evidence that enhancing the mental health treatment competencies of health care providers can help mitigate the lack of specialized mental health services (7). For example, a training program for community health clinic staff in Grenada demonstrated effective and efficient treatment of individuals with mental disorders following Hurricane Ivan (see Box 10.1) (8).

During the immediate aftermath of a disaster, the priorities are to treat aggravated mental disorders and minimize interruptions in ongoing treatment. In preparing for disaster, it is necessary to ensure that essential medications used to treat mental disorders will be easily available. The majority of psychopharmacological treatments fall into one of the following categories: antidepressants, anti-psychotics, anxiolytics/hypnotics, anti-Parkinsonian, mood stabilizers, and anti-epileptics. Many of these medications are used to treat more than one type of illness and can be used to treat symptomatically as well. For example, antidepressants

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Box 10.1**Mental health training assists in post-hurricane Grenada**

An innovative approach to addressing mental health needs following natural disasters in the Caribbean was implemented in the island country of Grenada. The training focused on enhancing the capacity of local, community-based health workers to provide immediate and continued mental health care following a natural disaster. Soon after this training, Hurricane Ivan (2004) struck the island. When surveyed about the effectiveness of the pre-disaster training, community health providers stated that they were able to effectively identify, intervene, and address post-disaster mental health needs in their communities. They stated that the care they provided for affected individuals continued beyond the immediate post-disaster period. This experience suggests that enhancing the capacity of local, community-based health providers to deal with post-natural disaster mental health needs may be a useful model (8).

are used to treat anxiety disorders, chronic headache, and fibromyalgia as well as depression; anxiolytics are used to treat insomnia, alcohol withdrawal, and seizures, including convulsive status epilepticus, as well as anxiety.²⁹



Due to the multiple uses of these medicines, a post-disaster first aid psychotropic kit does not necessarily need to include all medications in each category. The minimum medication provision suggested by WHO is: one generic anti-psychotic; one anti-Parkinsonian drug (to deal with potential extra-pyramidal side effects); one anti-convulsive/antiepileptic; one anti-depressant and one anxiolytic (for use in substance withdrawal and convulsions). We suggest adding as well one mood stabilizer (5). Table 10.1 includes a modified list of the essential psychotropic medications proposed by WHO as being part of a Post-Disaster First Aid Kit. The table includes uses of the medications as well as doses and side effects to allow for ease of application.

29. It should be noted that in the past, benzodiazepines were commonly used following a disaster due to their potential to reduce anxiety and improve sleep; it is currently known that they may interfere with the cognitive processing needed to deal with the trauma and therefore they are not recommended for routine use (9).

Table 10.1 Essential post-disaster psychotropic first aid kit

Drug class	Drug name	Uses (FDA approved and additional)	Initial dose (mg)	Dose range (mg/d)	Half life	Comments	Side effects
Antidepressant	Amitriptyline Tablet 25 mg	Depression, anxiety disorders (i.e. PTSD), chronic pain, fibromyalgia.	25 mg/d	75–300 mg/d	10–46 hrs	Initial dose may be divided or given as a single bedtime dose.	Dizziness or lightheadedness, drowsiness, confusion, constipation, difficulty urinating, dry mouth; discontinuation syndrome with abrupt discontinuation may occur.
Antipsychotic	Haloperidol Injection: 5 mg in 1-ml ampoule Tablet: 2 mg; 5 mg	Acute and chronic psychoses, acute mania, agitation/aggression, antiemetic, persistent hiccups, Huntington chorea, dementia-related behavioral problems.	0.5– 3 mg/d	3–20 mg/d	12–36 hrs	Neuroleptic malignant syndrome is a life-threatening neurological disorder caused by an adverse reaction to haloperidol Use with extreme caution in patients with Parkinson disease, movement disorders, seizures.	Blurred vision, constipation, dryness of mouth, sedation, unusual secretion of milk, weight gain Serious side effects: Tardive dyskinesia (a movement disorder: uncontrolled movements of the mouth, tongue, jaw, or arms and legs). Neuroleptic malignant syndrome (severe muscle stiffness, fever, unusual tiredness or weakness, rapid heartbeat, difficult breathing, increased sweating, loss of bladder control, and seizures).
Anxiolytic/hypnotic	Diazepam Tablet (scored): 2 mg, 5 mg Injection: 5 mg/ml in 2-ml ampoule Gel or rectal solution: 5 mg/ml in 0.5 ml; 2-ml and 4-ml tubes	Anxiety, insomnia (acute), alcohol withdrawal, depression with comorbid anxiety, panic disorder, seizures, neuroleptic induced akathisia, behavioral problems in patients with mania or psychosis and catatonia, tremor, parkinsonism, muscle spasm, complications with hallucinogens or overdose of stimulants, pre-operative medication.	For seizures control: Adult: 5 mg IV Adolescent : 2.5 mg IV Pediatrics: 0.2 mg IV	For seizures control: Adult:5–20 mg IV Adolescent: 2.5–10 mg IV Pediatric 0.2–5 mg IV	20–200 hrs	Long-term effects include tolerance, dependence as well as withdrawal syndrome. Adjust dosing in older persons.	Drowsiness, fatigue, sedation, confusion, anterograde amnesia (especially at higher doses).
Anti-Parkinsonian	Biperiden Injection: 5 mg (lactate) in 1-ml ampoule. Tablet: 2 mg (hydrochloride)	Parkinson disease, extrapyramidal side-effects.	1 mg/d	2–12 mg/d	24 hrs	Often can be tapered and discontinued after several weeks, without return of EPS.	Constipation, dry mouth, tachycardia, confusion, urinary retention, blurred vision.

Drug class	Drug name	Uses (FDA approved and additional)	Initial dose (mg)	Dose range (mg/d)	Half life	Comments	Side effects
Antiepileptic	Phenobarbital Injection: 200 mg/ml Oral liquid: 15 mg/5 ml Tablet: 15 mg to 100 mg	Generalized tonic-clonic, complex partial seizures; prevention of seizures relating to operative or traumatic neurological events	Child: up to 5 mg/kg daily Adolescent: 60–180 mg at night Adult: 1 mg/kg/d	Child: up to 5 mg/kg/d Adolescent: 60–180 mg at night Adult: 2–3mg/k/d	53–118 hrs	Can be used in status epilepticus when a benzodiazepine has failed. Given at night time reduces drowsiness during the day. Has addiction potential.	Dry mouth, blurred vision, drowsiness, euphoria or disorientation, urinary retention, postural hypotension, constipation, agitation, disturbed behavior.
Mood stabilizer	Lithium Tablets or capsule: 300 mg	Acute treatment of mania, bipolar depression, prophylaxis in classical bipolar disorder	300 mg Bid	600–1800 mg/d	20–26 hrs (longer with impaired renal function and in the elderly)	Measure serum lithium concentrations. Monitor renal and thyroid function. Maintain adequate fluid and sodium intake.	Nausea, vomiting, diarrhea, dry mouth, weight gain, fatigue, dizziness, fine hand tremor, polyuria, polydipsia, hypothyroidism, cognitive blunting, psoriasis, acne, alopecia, edema, teratogen. Toxicity: ataxia, vertigo, dysarthria, confusion, nystagmus.

Notes: Compiled from: WHO, *Model Formulary* (2008); *16th WHO Model List of Essential Medicines* (2010); D, Gardner, J, Russell, S. Kutcher, *The Psychotropic Handbook* (2006); Kaplan & Sadock's *Handbook of Psychiatric Drug Treatment*. Third edition, 2001. Bid = Twice a day; Tid = Three times a day.

The Post-Disaster Psychotropic First Aid Kit should include at least one medication from each of the five categories mentioned above and it should be distributed strategically over the entire health care system in order to be easily and equitably accessible in case of an emergency. The rapid access to essential psychotropic medications following a disaster may result in better outcomes for people with a previously diagnosed mental disorder. It will also allow health professionals to provide early interventions to those developing a mental disorder after the disaster. Along with access to the Post-Disaster Psychotropic First Aid Kit, it is essential to ensure that primary health care providers and other health services personnel providing post-disaster medical care have the necessary competency training to correctly use these medications. They should be capable of determining the following: initial dose; treatment target dose; dose titration; outcome monitoring; measurement of side effects; functional evaluation; treatment duration; and strategies for treatment discontinuation if warranted.

References

1. World Health Organization (WHO). *Public health risk assessment and interventions. Earthquake: Haiti*. Geneva: WHO, 2010. <http://tinyurl.com/6tvuun7>.
2. Lilienfeld, S. O. "Psychological treatments that cause harm." *Perspectives in Psychological Science*; 2007; 2:53–70.
3. Hussain, A., L. Weisaeth, T. Heir. "Psychiatric disorders and functional impairment among disaster victims after exposure to a natural disaster: a population based study." *Journal of Affective Disorders*. 2011; 128(1): 135–41. <http://tinyurl.com/7l77bx7>.

4. Jonathan, R.T., M.D. Davidson, et al. “Posttraumatic stress disorder: acquisition, recognition, course, and treatment.” *Journal of Neuropsychiatry Clin Neurosci.* 2004;16:135–147. <http://tinyurl.com/7h43hvd>.
5. Van Ommeren, M., C. Barbui, K. de Jong, T. Dua, L. Jones, et al. (2011). “If you could only choose five psychotropic medicines: updating the Interagency Emergency Health Kit.” *PLoS Med* 8(5): e1001030. doi:10.1371/journal.pmed.1001030. <http://tinyurl.com/72oh58t>.
6. Rodríguez, J., Zaccarelli, M. R. Pérez (eds.). *Practical guide for mental health in disaster situations*. Washington, D.C.: PAHO/WHO, 2006. <http://tinyurl.com/84ca92f>.
7. Kutcher, S., S. Chehil, T. Roberts. “An integrated program to train local health care providers to meet post-disaster mental health needs.” *Pan Am J Public Health.* 2005; 18(4–5):338–45. <http://tinyurl.com/6pette7>.
8. Kutcher S., S.Chehil. “Application of a needs-driven, competencies-based mental health training program to a post-disaster situation: the Grenada experience.” *American Journal of Disaster Medicine.* 2008;3(4):235–40. <http://tinyurl.com/7f6mqlr>.
9. Ursano, R.J., C. Bell, S. Eth, et al. Work Group on ASD and PTSD and the Steering Committee on Practice Guidelines. “Practice guidelines for the treatment of patients with acute stress disorder and posttraumatic stress disorder.” *Am J Psychiatry.* 2004; 161(suppl): 1–31.
10. World Health Organization. *WHO Model Formulary*. Geneva: WHO, 2008. <http://tinyurl.com/6rt6kv5>.
11. World Health Organization. *16th WHO Model List of Essential Medicines*. Geneva: WHO, 2010. <http://tinyurl.com/yzbdoyo>.
12. Gardner D., J. Russell, S. Kutcher. *The psychotropic handbook*, Third edition. Ontario: MDH Consulting Inc, 2006.
13. Sadock, B.J., V.A. Sadock. *Kaplan & Sadock's Handbook of Psychiatric Drug Treatment*. Third edition, 2001.



SECTION 3
Mental Health and Psychosocial
Support Interventions

Introduction

Over the past few decades there has been growing interest in and recognition of the need for evidence-informed, early psychosocial support following traumatic events. Psychological First Aid (PFA) is the approach recommended by many international expert groups, including WHO, the Sphere Project, and the Inter-Agency Standing Committee on Mental Health and Psychosocial Support, to support people affected by crisis events (3, 4, 5).

PFA is an evidence-informed intervention that addresses the practical psychosocial needs of individuals, families, and communities in the immediate aftermath of a disaster. In the early post-disaster phase, PFA facilitates recovery in affected individuals across all age groups by reducing the initial distress caused by traumatic events, helping them to meet their basic needs and connect with social supports and services, providing information, and fostering short- and long-term adaptive functioning and coping. PFA is based on the assumption that all people have innate coping abilities and the capacity to recover from distressing events, especially if they are able to restore basic needs and have access to support as needed.

Current PFA models are designed for delivery by a range of people—health or mental health personnel, disaster response workers, lay volunteers—who can offer early assistance to affected children, families, and adults. In large-scale events, PFA, as a psychosocial response, may be offered as one component of a multi-sectoral disaster management program (6). It may be necessary for a helper or responder to act quickly in an acute crisis situation, but wherever possible, it is recommended that PFA providers work through an established organization or community group to improve the overall coordination of relief efforts. By working through an organization or group, the helper may have access to resources and information that will enable him/her to provide better assistance to those affected, and for their own support and security while providing assistance.

PFA is an immediate, short-term intervention offered to affected people soon after they have experienced a very distressing event—either immediately following exposure to a criti-

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cal event or some days or weeks after, depending on when the helper encounters the person and their needs. Some people who have experienced a crisis may require help and support for a longer period of time, or may require more advanced care and support (health, mental health, legal or social services). Follow-up psychosocial support with families and individuals (see Chapter 12) may be indicated.

PFA is designed to be flexible and adaptable to a variety of settings, contexts, cultures, and needs; it provides an evidence-informed framework for intervention on which to build locally appropriate, acceptable, and responsive programming (2, 5, 7, 8). It is currently being implemented in countries around the globe (7, 9, 10), as a response to events affecting individuals or groups of people. As each crisis situation is unique, PFA must be tailored to the particular context, culture and social situation (see Chapter 6 of this book).

Foundations of PFA

PFA describes a humane, supportive, and practical response to fellow human beings suffering exposure to serious stresses and who may need support. PFA should be distinguished from clinical mental health care, emergency psychiatric interventions, or psychological debriefing. The approach does not require clinical expertise or a discussion of the event that caused the distress. Furthermore, PFA cannot be assumed to prevent longer-term mental health sequelae of trauma or to reliably assist in identifying individuals at risk for developing later mental disorders. Rather, it is an empathic and pragmatic approach to assist persons in distress to stabilize and begin their own practical and emotional recovery (8).

The term “psychological first aid” was first coined at the end of World War II (1). There has been a recent trend to more clearly articulate the PFA approach and its components according to evidence-informed practices. Empirical evidence (2, 5, 11) for PFA draws from two burgeoning areas of behavioral science research: Research on factors influencing individual and community risk and resilience in the aftermath of disaster and research on the factors influencing the restoration of social and behavioral functioning post-disaster (6, 13, 14).

Existing evidence and professional consensus underscore the utility of PFA in the early stages of psychosocial response to crisis events, namely:

- ◆ Certain factors such as perceived poor social support are associated with increased rates of post-traumatic stress disorder following traumatic events (15).
- ◆ The TENTS Delphi study found strong consensus for provision of general support, access to social support, physical, and psychological support (16).
- ◆ NATO Guidelines promote PFA as part of psychosocial emergency plans because “the abilities of people to accept and use social support and the availability of it are two of the key features of resilience” (17).
- ◆ IASC and Sphere Guidelines recommend that PFA be made available to acutely distressed persons following extreme events and that some forms of psychological support should be easily taught to and provided by lay persons (4, 5).

According to experts in the field of disaster response, social care responses—including access of survivors to social, physical, and psychological support—are key aspects of resilience (16, 17). PFA approaches translate these key aspects into actions that can be easily taught to and provided by lay persons, in accordance with humanitarian guidelines (5).

Five empirically supported principles guide practices and programs for psychosocial intervention in the aftermath of disaster. These principles help to form a foundation for the PFA approach described below (6):

- ◆ Promote sense of safety
- ◆ Promote calming
- ◆ Promote sense of self and collective efficacy
- ◆ Promote connectedness
- ◆ Promote hope

In summary, PFA is evidence-informed and consistent with strong professional consensus for social support of persons in the early aftermath of exposure to critical events, and in consideration of the wider socio-cultural context in which those events occur (8).

PFA approach

The goals of PFA are pragmatic and constructed around practical areas of action. Several guides and manuals exist for the provision of PFA to various groups of people. Annex 11.1 to this chapter contains a list of relevant resources developed in various international settings. Although the different resources vary in the principles, actions or steps they define in their approach, they share certain elements basic to the provision of PFA. Also appended to this chapter (Annex 11.2) is the ‘Psychological first aid pocket guide’, excerpted from the WHO Psychological first aid: guide for fieldworkers (8). According to this guide, the main principles of PFA are to:

- ◆ Provide practical care and support which does not intrude
- ◆ Assess needs and concerns
- ◆ Help people to address basic needs (for example, food and water, information)
- ◆ Listen to people, without pressuring them to talk
- ◆ Comfort people and help them to feel calm
- ◆ Help people connect to information, services, and social supports
- ◆ Protect people from further harm

Good communication skills are key to offering PFA effectively and respectfully to people in distress. Guidance on active listening, empathy, and socio-cultural considerations in communication are described in most PFA resources. Effective communication is based on an understanding of the cultural and social norms of the people being helped, and how to speak and behave in ways that are respectful and appropriate. For example, the helper or responder begins by introducing themselves by name and their organizational affiliation. It is

often helpful for people learning about PFA to practice active listening, i.e., how to ask about people's needs and concerns, how to listen and respond without judging the affected person (i.e., about how they feel or things they did or did not do during the crisis), and how to offer assistance in ways that respect and promote the ability of affected people to help themselves. Being able to listen well and to be calm and caring in one's verbal and non-verbal communication (i.e., body language, eye contact) can be a great support to people in distress.

PFA does not involve pressuring people to tell details of the story of what happened to them or their feelings about the event. The helper or responder can be supportive also by sitting quietly with someone in distress or who does not want to talk; by offering practical comfort, such as a glass of water or a blanket, if possible. The helper or responder must also remember that their assistance will be time-limited. Therefore, it is important that those offering PFA aim to help affected people to mobilize their own coping resources, and know how to connect with available services and supports that they may need in the course of their recovery.

Practical support, information, and connection with loved ones and services are also basic elements in the provision of PFA. People impacted by crisis events may have a range of basic needs such as food, shelter, and health services. By learning about available services and supports, the responder can help affected people to link with those services in order to meet their basic needs. People affected by crisis events are almost always in need of accurate information about the event, any plans being made by people in charge of the response (i.e., shelter arrangements in disasters), and the welfare and whereabouts of friends and loved ones. Those providing PFA should be well-informed and be able to offer accurate information to affected individuals and groups. People affected by crisis events may also be separated from their family or community. Although the helper should not force social support, it is often useful to offer to help affected people to connect with loved ones and persons they trust.

Certain people in crisis situations may be particularly vulnerable, and may need extra assistance to be safe, to access basic needs and services, and to connect with loved ones and social support. According to the Psychological first aid: guide for field workers (8), people who may need special attention in a crisis include:

- ◆ Children and adolescents, especially those separated from their caregivers;
- ◆ People with health conditions or physical and mental disabilities (i.e., frail older persons, pregnant women, people with severe mental disorders, or people with vision or hearing difficulties);
- ◆ People at risk of discrimination or violence, such as women or people of certain ethnic groups.

The helper or responder should be aware of people who may need special assistance or referral to professional health or mental health care. By knowing their limitations in providing assistance, the responder can best provide care and support in ways that ensure the well-being and safety of both themselves and the people they are helping.

Good practice

To offer PFA in a responsible way, it is important for any helper or responder to be aware of and to follow guidelines of good practice. The first is the principle of “do no harm.” Helpers, responders, or any person or agency involved in humanitarian response will interact with people who may have experienced severe and traumatic events, and who may be facing new challenges in their lives without the supports and resources they normally rely on. In all of their actions, those providing assistance must strive to avoid causing further harm to affected people. It is important for any helper or responder to know about and adhere to any ethical codes of conduct that their organizations or agencies follow. According to the Psychological first aid: guide for field workers (8), the following principles help to ensure that helpers or responders offer PFA in a way that respects people’s safety, dignity and rights:

Safety

- ◆ Avoid putting people at further risk of harm as a result of your actions.
- ◆ Make sure, to the best of your ability, that the adults and children you help are safe and protect them from physical or psychological harm.

Dignity

- ◆ Treat people with respect and according to their cultural and social norms.

Rights

- ◆ Make sure people can access help fairly and without discrimination.
- ◆ Help people to claim their rights and access available support.
- ◆ Act only in the best interest of any person you encounter.

These principles may have particular meanings in different socio-cultural contexts and how they are applied should be considered carefully. For example, acting ‘only in the best interest of the people one is helping’ means that the helper or responder should not ask for any money or favor in exchange for the assistance he/she provides. Ensuring people are safe and protected from further harm may be challenging in some situations and require the helper or responder to take decisions using his or her best judgement. Treating people with respect also involves communicating with them in a non-judgmental way, particularly about their feelings or actions during the crisis situation.

It is also essential for the helper or responder to take into account the culture of the people he or she is assisting. Culture shapes how we think, behave, and relate to people around us—including what is and is not appropriate to say and do. For example, the gender of the responder must be considered when offering assistance (e.g., in some cultures, it is only appropriate for women to speak with women). It is essential that any model of PFA be adapted to be acceptable and appropriate to the people who are being helped, and that responders are aware of their own beliefs so they can set aside any biases as they offer support to survivors (8).

Finally, helping responsibly also means that those providing assistance practice good self- and team-care strategies. Helpers and responders are often exposed to the traumatic stories of the people they are helping, and may witness destruction, injury, and death. They and their families may also be directly impacted by the crisis situation, or to similar events in their past. Providing assistance to others in difficult circumstances can be emotionally and physically stressful and requires helpers and responders, as well as the organizations and agencies with whom they work, to pay particular attention to their own health and emotional well-being. For example, helpers should consider:

- ◆ Their motivation and readiness to help in each crisis situation.
- ◆ Personal considerations (e.g., health problems, family stresses) that may affect their ability to respond and their well-being.
- ◆ How to cope in healthy and adaptive ways with stress (e.g., getting enough rest) and minimizing negative coping strategies (e.g., avoiding working excessive hours or days without time off).
- ◆ How best to support their fellow helpers and responders (e.g., having a buddy system for support and safety).
- ◆ Taking time to rest and reflect with a supervisor or persons they trust after ending their assistance.

Summary

PFA is the recommended approach for offering humane, practical and empathic support to people in the aftermath of crisis events. It is designed to reflect the realities of diverse cultures, settings and contexts in which it is to be applied and promotes the strengthening of natural healing practices, social networks, and self-efficacy. PFA can be employed by trained health workers, disaster responders, and lay volunteers to provide individuals and families with immediate psychosocial support that facilitates adaptive coping. Within a larger framework of emergency or humanitarian response, PFA can promote the efficient use of available resources by linking psychological first aid to the broader, comprehensive crisis response involving multiple sectors and a range of interventions. When linked to the broader network of supports available to survivors in their own communities, as well as within the health and social sectors, PFA can assist in the provision of a continuum of care across multiple domains of need.

References

1. Blain, D., P. Hoch, V.G. Ryan. "A course in psychological first aid and prevention: a preliminary report." *American Journal of Psychiatry*. 1945; 101:629-634.
2. Ruzek, J.I., M.J. Brymer, A.K. Jacobs, C.M. Layne, E. Vernberg, P.J. Watson. "Psychological first aid." *Journal of Mental Health Counselling*. 2007; 29(1):17-49.

3. World Health Organization. *mhGAP intervention guide for mental health, neurological and substance use disorders in non-specialized health settings*. Geneva: WHO Mental Health Gap Action Programme, 2010. Available at: http://www.who.int/mental_health/mhgap.
4. Sphere Project. *Humanitarian charter and minimum standards in disaster response*. Geneva: The Sphere Project, 2011. Available at: <http://www.sphereproject.org>.
5. Inter-Agency Standing Committee (IASC). *IASC guidelines on mental health and psychosocial support in emergency settings*. Geneva: IASC, 2007. Available at: http://www.who.int/mental_health_psychosocial_june_2007.pdf.
6. Hobfoll, S.E., P.J. Watson, C.C. Bell, R. A. Bryant, C.M. Layne, J.I. Ruzek, et al. "Five essential elements of immediate and mid-term mass trauma intervention: empirical evidence." *Psychiatry: Interpersonal & Biological Processes*. 2007; 70(4): 283–315.
7. Brymer, M., A. Jacobs, C. Layne, R. Pynoos, J. Ruzek, A. Steinberg, E. Vernberg, P. Watson. *Psychological first aid: field operations guide, 2nd Edition*. National Child Traumatic Stress Network and National Center for PTSD. 2006. <http://tinyurl.com/64jez95>.
8. World Health Organization, World Vision International, and War Trauma Foundation. *Psychological first aid: guide for field workers*. Geneva: WHO, 2011. <http://tinyurl.com/3pd9deg>.
9. Uhernik, J.A., M.A. Husson. "Psychological first aid: an evidence informed approach for acute disaster behavioral health response." In G. R. Walz, J. C. Bleuer, and R. K. Yep (Eds.), *Compelling counselling interventions*. Alexandria, VA: American Counselling Association. 2009: 271-280.
10. U.S. Department of Health and Human Services. *Mental health response to mass violence and terrorism: a training manual*. DHHS Pub. No. SMA 3959. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration, 2004. Available at: <http://tinyurl.com/7576xob>.
11. Roberts N.P., N. J. Kitchiner, J. Kenardy, J. Bisson. "Multiple session early psychological interventions for the prevention of post-traumatic stress disorder." *Cochrane Database of Systematic Reviews*. 2009, Issue 3. Art. No.: CD006869. DOI: 10.1002/14651858.CD006869.pub2.
12. Rose S.C., J. Bisson, R. Churchill, S. Wessely. "Psychological debriefing for preventing post traumatic stress disorder (PTSD)." *Cochrane Database of Systematic Reviews* 2009, Issue 2. *Cochrane Database of Systematic Reviews* 2002, Issue 2. Art. No.: CD000560. DOI: 10.1002/14651858.CD000560.
13. Herman J. L. *Trauma and recovery: the aftermath of violence from domestic abuse to political terror*. Basic Books, 1997; Chapter 2:33.
14. Singer T. "An introduction to disaster: some considerations of a psychological nature." *Aviation, Space, & Environmental Medicine*. 1982; 53(3): 245–50.

15. Bisson, J.I., C. Lewis. *Systematic review of psychological first aid*, Geneva: WHO, 2009.
16. TENTS Project Partners. *The TENTS guidelines for psychosocial care following disasters and major incidents*. 2009. Available at: <http://www.tentsproject.eu>.
17. North Atlantic Treaty Organization (NATO). *Psychosocial care for people affected by disasters and major incidents: a model for designing, delivering and managing psychosocial services for people involved in major incidents, conflict, disasters and terrorism* (Annex 1 to EAPC (JMC)N(2008)0038). Brussels: NATO, 2009.

Annex 11.1: PFA Resources

The following list of PFA manuals is taken from the PFA Anthology of Resources developed by War Trauma Foundation and World Vision International. The full list of resources, including articles, informational materials and guides can be accessed at: www.wartrauma.nl/.

Freeman, C., A. Flitcroft, P. Weeple (2003). *Psychological first aid: a replacement for psychological debriefing. Short-term post trauma responses for individuals and groups*. The Cullen-Rivers Centre for Traumatic Stress, Royal Edinburgh Hospital.

Headington Institute (2007). *Trauma and critical incident care for humanitarian aid workers*. Web-based interactive training material. Available at: www.headington-institute.org.

International Federation of the Red Cross and Red Crescent Societies (2009). *Community-based psychosocial support, a training kit (participant's book and trainers book). Module 5: psychological first aid and supportive communication*. Denmark: International Federation Reference Centre for Psychosocial Support. Available at: www.ifrc.org/psychosocial.

International Organization for Migration (2008). *After the wind, rain and water: community level handbook for helping*. IOM: Yangon, Myanmar. Available at: www.iom-seasia.org.

National Child Traumatic Stress Network and National Center for PTSD (2006). *Psychological First Aid: Field Operations Guide, 2nd Edition*. Available at: www.nctsn.org and www.ncptsd.va.gov.

National Institute of Mental Health and Neurosciences, Bangalore (NIMHANS) and CARE India (2005). *Psychosocial care in disaster management: facilitation manual for trainers of trainees in natural disasters*. Available at: http://www.nimhans.kar.nic.in/dis_man/train_nd1.pdf.

Saeed, Khalid (2006). *Manual for training primary health care physicians, general practitioners and specialists from related disciplines*. WHO Eastern Mediterranean Unit.

Schreiber, R., Gurwitch, M. and Wong, M. (2006). *Listen, protect, connect*. The Advertising Council and U.S. Department of Homeland Security, and The National Center for School Crisis and Bereavement. Available at: www.ready.gov.

U.S. Department of Education, Readiness and Emergency Management for Schools (REMS) Technical Assistance Center (2008). Profiled in *Helpful Hints for School Emergency Management*, Newsletter of the U.S. Department of Education—Readiness and Emergency Management for Schools (REMS) Technical Assistance Center, Vol. 3 (3), 2008. Available at: <http://www.ready.gov/>.

- *Psychological first aid (PFA) for students and teachers: listen, protect, connect—model & teach;*
- *Family to family, neighbor to neighbor: PFA for the community helping each other;*
- *Model and teach: psychological first aid for students and teachers;*
- *Psychological first aid for children and parents.*

U.S. State of Indiana, Family & Social Services Administration, Division of Mental Health and Addiction *Disaster mental health intervention field guide*. Available at: <http://tinyurl.com/8ysoyp5>.

War Trauma Foundation and World Vision International (2010). *Psychological first aid anthology of resources*. Available at: www.interventionjournal.com/ and www.psychosocial-network.net/.

World Health Organization, World Vision International and War Trauma Foundation (2011). *Psychological first aid: guide for field workers*. Geneva: WHO, 2011. <http://tinyurl.com/3pd9deg>.

Annex 11.2 Psychological First Aid Pocket Guide

Providing Psychological First Aid responsibly means:

1. Respect safety, dignity and rights.
2. Adapt what you do to take account of the person's culture.
3. Be aware of other emergency response measures.
4. Look after yourself.

Prepare	<ul style="list-style-type: none"> • Learn about the crisis event. • Learn about available services and supports. • Learn about safety and security concerns.
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Action Principles of PFA:

Principle	Action
LOOK	<ul style="list-style-type: none"> • Check for safety. • Check for people with obvious urgent basic needs. • Check for people with serious distress reactions.
LISTEN	<ul style="list-style-type: none"> • Approach people who may need support. • Ask about people's needs and concerns. • Listen to people and help them to feel calm.
LINK	<ul style="list-style-type: none"> • Help people address basic needs and access services. • Help people cope with problems. • Give information. • Connect people with loved ones and social support.

Ethics:

Ethical do's and don'ts are offered as guidance to avoid causing further harm to the person, to provide the best care possible and to act only in their best interest. Offer help in ways that are most appropriate and comfortable to the people you are supporting. Consider what this ethical guidance means in terms of your cultural context.

Do's	Don'ts
<ul style="list-style-type: none"> • Be honest and trustworthy. • Respect people's right to make their own decisions. • Be aware of and set aside your own biases and prejudices. • Make it clear to affected people that even if they refuse help now, they can still access help in the future. • Respect privacy and keep the person's story confidential, if this is appropriate. • Behave appropriately by considering the person's culture, age and gender. 	<ul style="list-style-type: none"> • Don't exploit your relationship as a helper. • Don't ask the person for any money or favor for helping them. • Don't make false promises or give false information. • Don't exaggerate your skills. • Don't force help on people and don't be intrusive or pushy. • Don't pressure people to tell you their story. • Don't share the person's story with others. • Don't judge the person for their actions or feelings.

People who need more than PFA alone:

Some people will need much more than PFA alone. Know your limits and ask for help from others who can provide medical or other assistance to save lives.

<p>People who need more advanced support immediately:</p> <ul style="list-style-type: none"> • People with serious, life-threatening injuries who need emergency medical care. • People who are so upset that they cannot care for themselves or their children. • People who may hurt themselves. • People who may hurt others.

Community-Based and Self-Help Psychosocial Interventions during Different Phases of Disasters

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Introduction

Planning for mental health issues in emergencies and disasters has emerged as a fundamental aspect of how communities, families, and individuals prepare for these situations. Yet these considerations often remain implicit and poorly defined. As we shall discuss, behavioral and psychosocial problems are expected to occur, given the context of the many challenges these extreme events cause. One of the most important loci for intervention is at the community level, with families and individuals engaging in relatively non-specialized activities, aimed at reinforcing a return to normal living conditions.

When communities are insufficiently prepared, their capabilities can be overwhelmed. Looking more closely at what makes up effective community-based and self-initiated interventions will enable better planning for the humane, competent, and compassionate care for victims during a disaster and in the aftermath, when recovery is the goal.

This chapter is about the non-medical and non-specialized interventions that hold great potential for preventing adverse mental health outcomes and enhancing healthy adaptation. It will examine some of the people, places, and ways that are likely to provide the best basic community- and self-based interventions in disasters. Of course human, geographical, organizational, and technical resources vary from one place to another, so the interventions discussed need to be framed in the realities of each community and its particular strengths and abilities, while understanding the possible pitfalls.

Recognizing the limits of community-based mental health interventions

While community-based interventions play an important role in preventing and reducing acute mental health reactions, they also help to detect a number of problems requiring

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intervention. Acquiring the basic ability to be sensitive to and recognize the appearance of more severe symptoms is a definite asset at the community level. It is important to have some notion of when reactions are excessive and may require medical assessment. Throughout this chapter, we will stress this point: the goal is to achieve what is possible, while collaborating with the complete system of health care set in motion by the disaster.

The frequency of mental health problems in emergencies and disasters

Each disaster is a distinct entity, difficult to compare to others. This is because the type and severity of the hazards vary and differences exist in the level of preparedness, the density of the population, the country's ability to deal with the disaster, and numerous other factors (1). Let it be said simply that the severity of mental health problems that arise in the aftermath of any disaster varies from the minimal and transient level to the very severe level of distress (2). In a summary article on the topic, Norris et al. emphasized that youth are often reported to suffer severe or very severe distress (3). They also note that most problems were reported to peak in the first year after the disaster and usually improved over time.

Looking at the types of problems encountered during disasters and emergencies, one will see mainly the following psychosocial problems: fear and distress, psychological disorders or psychiatric illnesses, social disorder, violence, and consumption of addictive substances. Psychiatric problems are not the most prominent of these.

The World Health Organization (WHO) has proposed a rough projection for 12-month prevalence rates of various mental health problems, as shown in Table 12.1 (4). It should be emphasized that observed rates vary with the setting (e.g., time elapsed since the onset, socio-cultural factors in coping, community social support, previous and current disaster exposure) and assessment method, but give an approximate indication of what WHO expects the extent of morbidity and distress to be. Despite limitations, the figures can help form an idea of proportions and types of problems that are likely to occur.



Table 12.1 WHO projections of psychological distress and mental disorders in adult emergency-affected populations

Type of disorder or distress	Before the emergency: 12-month prevalence (median across countries and across level of exposure to adversity) ^a	After exposure to the emergency: 12-month prevalence (median across countries and across level of exposure to adversity)
Severe disorder (e.g., psychosis, severe depression, severely disabling form of anxiety disorder)	2%–3%	3%–4% ^b
Mild or moderate mental disorder (e.g., mild and moderate forms of depression and anxiety disorders, including mild and moderate PTSD)	10%	15%–20% ^c
"Normal" distress/other psychological reactions (no disorder)	No estimate	Large percentage

Source: World Health Organization. Mental health assistance to the populations affected by the tsunami in Asia [Internet] 2005 [cited 1 June 2010]. Available from: <http://tinyurl.com/7fk589>.

Notes: PTSD indicates post-traumatic stress disorder.

a. The assumed baseline rates are the median rates across countries as observed in the World Mental Health Survey 2000.

b. This is a best guess based on the assumption that trauma and loss (a) may exacerbate previous mental illness (e.g., it may turn moderate depression into severe depression), and (b) may cause a severe form of trauma-induced common mental disorder.

c. It is established that trauma and loss increase the risk of common mental disorders (depression and anxiety disorders, including post-traumatic stress disorder).

Expected psychological phases of disasters and emergencies

Just as there are psychological phases in our reactions to many events in life, disasters also take victims through a series of phases largely determined by the specific realities of the disaster. While there is always a risk of aligning expectations too rigidly with a developmental sequence, having an appreciation of the unfolding psychosocial reactions to disaster is valuable in presenting a timeline to follow in the preparation for, the progression of, and the aftermath of a disaster, and in the long-term planning for recovery from it. It also provides insight into when certain psychological interventions may be more or less useful as individuals and the community move through particular phases.

Following is a description by D.J. DeWolfe of the community-related issues that are likely to occur through these phases (5):

“During the week to months following a disaster, formal governmental and volunteer assistance may be readily available. Community bonding occurs as a result of sharing the catastrophic experience and the giving and receiving of community support. Survivors may experience a short-lived sense of optimism that the help they will receive will make them whole again.”

“As disaster assistance agencies and volunteer groups begin to pull out, survivors may feel abandoned and resentful. The reality of losses and the limits and terms of the available assistance becomes apparent. Survivors calculate the gap between the assistance they have received and what they will require to regain their former living conditions and lifestyle. Stressors abound—family discord, financial losses, bureaucratic hassles, time constraints, home reconstruction, relocation, and lack of recreation or leisure time. Health problems and exacerbations of pre-existing conditions emerge due to ongoing, unremitting stress and fatigue” (5, pg. 23).

Community-based and self-help interventions in different phases of a disaster

A rationale for community-based mental health interventions

The case for mental health interventions in disasters has been made in other chapters. In general clinical practice, early attention to problematic mental health symptoms has been shown to offer some advantages. Whether this is also true for problems arising in the context of a disaster is more complex and continues to stimulate heated debate. Some authorities concur that earlier interventions for mental health problems can speed recovery, prevent long-term problems, and foster resiliency (6). Generally, most will agree that early intervention after a disaster is indicated only if it is of the right kind.

The point is that for the most part, the best interventions will be those that do not unduly pathologize or ‘psychiatrize’ behavioral problems, but rather which adequately foster adaptations that are meaningful and normative for that community and culture, so long as they conform to basic human rights and are aimed at protecting the individuals who are suffering.

In fact, the notions that humanitarian workers will develop about a culture are often based on false representations or interpretations of what they observe, or on general notions about the culture in question. This is why effective community-based interventions help the community itself regain its capacity to offer the kind of help and support that is appropriate to that locality—help which may be quite different from that which the humanitarian worker believes to be right (7). Community-based approaches gain in relevance and power if aid workers are able to enhance the naturally-occurring psychosocial resources within their communities, tapping into the sensitivity and culture-based knowledge that is suited to the needs and circumstances, to the language, to the religious considerations, and to the comfort-level of the disaster survivors. Formal or external counseling or support groups may be unwelcome within communities attempting to regain a sense of connection.

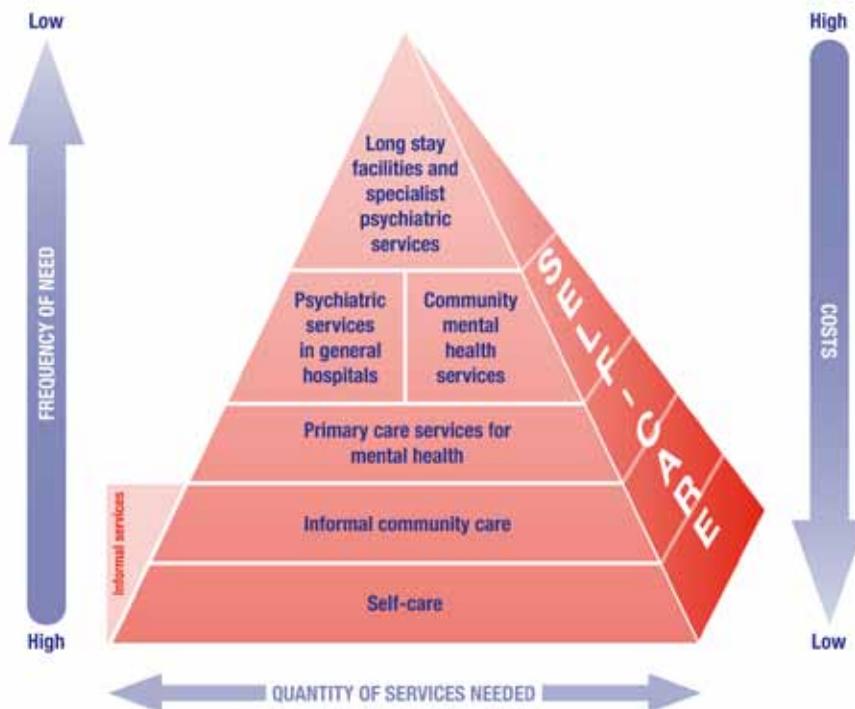
“After the tsunami that hit Aceh in Indonesia on December 26th 2004, community workers from other parts of the country were trained to bring their expertise to Aceh. But even though they were from the same country, they were perceived with mistrust and a sense that they could not understand the particular situation in Aceh, where strong senti-

ment against the central Indonesian government had long existed and had led to recent clashes. It became evident that it was more appropriate and acceptable to train local community workers, or at least to involve them prominently in the training to permit taking into account the specific cultural and political issues in planning interventions” (M.L. personal communication).

Such considerations beg the question of how to make mental health and psychosocial support interventions as widely accessible as possible. Clearly, much psychosocial support accrues from informal channels of help and from non-specialized health care settings, where a more integrative approach is offered. WHO recommends this type of non-specialized, wide-based approach as a general way of organizing mental health services (Figure 12.1). The bottom of the organizational pyramid represents the services most needed, which include the two types of care this chapter discusses (8). A similar pyramid (Figure 12.2) depicts the recommended types of psychosocial interventions that should be available in emergencies and disasters, again with the bottom of the pyramid representing the most important services (9).

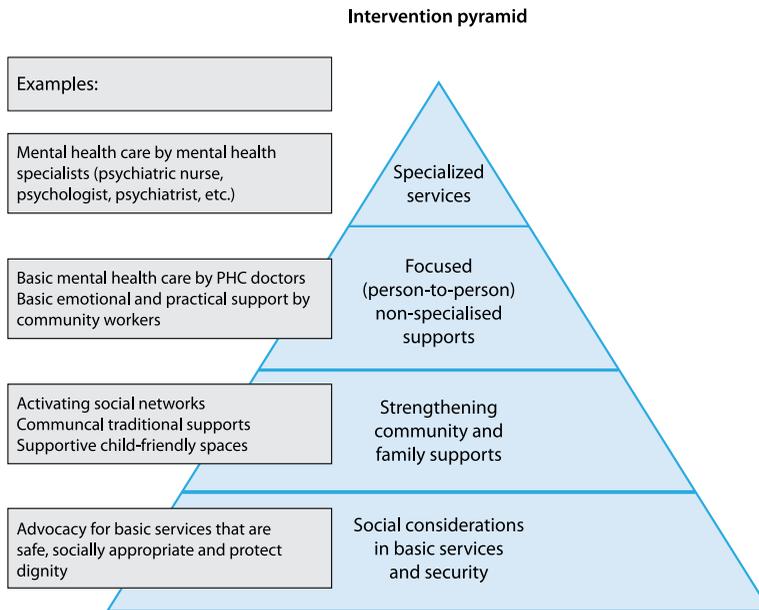
Strengthening community and family support, usually an informal and implicit form of care, constitutes a basic level of care. WHO recommends taking a comprehensive approach to health, integrating informal and community-based care with more formal primary health

Figure 12.1 Self-care pyramid: WHO model of organization for an optimal mix of mental health services



Source: WHO, Integrating mental health into primary care: A global perspective, 2008. p. 16.

Figure 12.1 Self-care pyramid: WHO model of organization for an optimal mix of mental health services



Source: Inter-Agency Standing Committee (IASC). IASC guidelines on mental health and psychosocial support in emergency settings: what should humanitarian health actors know? Geneva: IASC, 2010; pg. 3.

care services, and including promotion of mental health and ad-hoc preventive measures (8). Of course, specialized care also comes into the picture, but only for a small proportion of problems, and in a focused manner, as the resources are usually not available and often not necessary.

In community-based work, methodologies relying on group work are recommended in the interest of making interventions available to as many people as possible. In approaching children, the use of child-child and child-adult strategies (using games, sports, and other forms of expression) are seen as fundamental tools for the rehabilitation and ongoing development of children and adolescents.

Paradoxically, disasters may have the effect of reducing the stigma and invisible barriers that would otherwise exist to accessing mental health services. This is probably true because people feel justified in using such services when the suffering is so evident and widespread. This was the case in the aftermath of the 2010 Haiti earthquake. However, most people do not see their needs as related to ‘mental health problems’ and often do not consult mental health services (10). Indeed, others may be averse to seeking mental health services.

The question of “at-risk groups”

Chapter 9 discusses groups that are at high-risk for developing mental health difficulties in disasters. However, it is important to remember that the hardest hit populations often are

among the poorest and are already more vulnerable even before a disaster strikes. Poverty has been identified as being predictive of a worse outcome in cases of natural disasters. Of the more than 6,000 natural disasters recorded between 1970 and 2002, a reported three-fourths of the events and 99% of the people affected were in developing countries (11). On average, more than 2% of the population is affected each year and disasters cause more than one-half of 1% of GDP in damage. Both figures are about 10 times greater than in advanced economies. Unfortunately, it is also true that in these countries, the burden of illness from mental health problems is very high, as is the mental health care gap (12). But even within populations hit by a natural disaster, certain subgroups at relatively greater risk may require specially adapted interventions.

Ideally, all groups would be equally and fully prepared for a disaster, and would not require a distinct approach. However, it is advised to plan and prepare appropriately to avoid that all, even the most vulnerable, suffer the negative outcomes that are associated with a disaster.

In reality, those who were already marginalized before the onset of a crisis receive scant attention, as they are less visible, often less vocal and frequently remain unsupported both during and after the crisis. Humanitarian aid workers must advocate within the community and beyond on behalf of marginalized and at-risk persons and approach their work by linking it to social justice principles. Among the groups who are likely to be at higher risk for mental health complications in disasters and emergencies, are the following: the young, older and frail persons, pregnant women, single mothers, cultural and ethnic minority groups, persons lacking caregivers or local social support, low socioeconomic status groups, people living in group facilities, people with serious or persistent mental illness or with other disabilities (intellectual disabilities, cognitive impairment, sensory impairments, poor physical health, complex medical illness), and human service and disaster relief workers (1). We will introduce some community-based and self-help approaches more specifically indicated for vulnerable groups; interventions for these groups are also covered in Chapter 9.

Interventions through the phases of a disaster

Following is a discussion of three phases of a disaster: preparedness, response and recovery. The ISDR glossary of Terminology on disaster risk reduction defines each phase as follows:

- ◆ Preparedness action aims to build the capacities needed to efficiently manage all types of emergencies and achieve orderly transitions from response through to sustained recovery. Preparedness is based on a sound analysis of disaster risks and good linkages with early warning systems, and includes such activities as contingency planning, stockpiling of equipment and supplies, the development of arrangements for coordination, evacuation and public information, and associated training and field exercises. These must be supported by formal institutional, legal and budgetary capacities. The related term ‘readiness’ describes the ability to quickly and appropriately respond when required.

- ◆ The response phase includes the provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected. It is predominantly focused on immediate and short-term needs and is sometimes called ‘disaster relief.’ The division between this response stage and the subsequent recovery stage is not clear-cut. Some response actions, such as the supply of temporary housing and water supplies, may extend well into the recovery stage.
- ◆ The recovery task of rehabilitation and reconstruction begins soon after the emergency phase has ended, and should be based on pre-existing strategies and policies that facilitate clear institutional responsibilities for recovery action and enable public participation. Recovery programmes, coupled with the heightened public awareness and engagement after a disaster, afford a valuable opportunity to develop and implement disaster risk reduction measures and to apply the ‘build back better’ principle.

1. Interventions through the phases of a disaster—Preparedness

Some actions will help buttress people’s sense of mastery in chaotic situations and promote recovery. Preparing for disaster, educating the population about normal responses to such events, providing training on what to do to help psychological recovery, setting up information centers and offering ongoing information feedback to affected communities all help people’s mastery and recovery. For these reasons, WHO recommendations prominently include community-based and primary health care-based interventions in the preparedness phase, as well as during and after the disaster (1).

National disaster preparedness plans must be drawn up well ahead of emergencies and involve not only a system of coordination between focal points within relevant agencies, but also, and prominently, a detailed plan for adequate social and mental health response within communities (see Chapter 3 on this topic). In this way, most mental health and psychosocial care and interventions will take place not only within primary health care settings, but also and especially within communities themselves, enhancing the care afforded by families and by available resources. As is the case with disaster preparedness plans, preparing community resources to be available in emergencies should be undertaken beforehand.

2. Interventions through the phases of a disaster—Response

Public education and information messages can play a central role in minimizing psychosocial complications in the victims. However, much of this information will need to be taken up and adapted within each community. Information about the disaster, helping victims orient themselves as to what to expect and where to find water, food, shelter, safety, and medical attention, and about where to locate family and community members are most urgently needed in the early response phase. Messages are most meaningful if they respond to specific community needs—such as where to find shelter and water.

Only after the response phase will it become useful to inform people about the psychological reactions they can expect and provide information about ways to handle the stress with which they are dealing. Public information about normal reactions, education about

ways to handle them, and early attention to symptoms that are problematic can speed recovery and prevent long-term problems (9). Sources of information on the topic include IASC, WHO, and SAMHSA documents (9, 12, 13, 14).

The Response Phase—types of mental health assistance

In the immediate aftermath of a disaster, practical assistance and interventions that are commensurate with people's immediate needs can easily become part of 'psychosocial' interventions, as they constitute supportive responses that are targeted at diminishing worsening psychological distress (5).

"An aid worker was helping someone look for lost belongings among the debris of her collapsed home after a strong hurricane. The victim spontaneously spoke of being concerned about her older parents who lived in a distant province and she had not been able to call since the events. The aid worker immediately arranged for her to use the phone of her aid organization. There was great relief in the parents when they heard the victim's voice, as they thought she might have died in the storm" (M.L. personal communication).

In parallel to these practical considerations, relief from stress, the ability to talk about the experience even informally, and the passage of time usually lead to the reestablishment of psychological equilibrium (10). Of course, this does not exclude the fact that the types of mental health and psychosocial support that will be required will run the full gamut of needs and interventions, and will occur at different times during and after the disaster.

The Inter-Agency Standing Committee Guidelines (13) highlight the importance of facilitating conditions for community mobilization, ownership, and control of emergency response in all sectors, community self-help and social support, and appropriate communal, cultural, spiritual and religious healing practices. The guidelines underscore the principles of preventing separation and facilitating support for young children (0–8 years) and their caregivers, and strengthening access to safe and supportive education. Interestingly, for persons who are unable to return to their own communities, it is recommended that social considerations such as safe, dignified, culturally and socially appropriate assistance in site planning and shelter provision, and in the provision of water and sanitation are taken into account.

The response phase—locus of assistance

Primary health care and emergency care settings

A person's behavioral problems can fail to improve even with appropriate help from the community's resources, and it is very important for community-based agents to identify when this is the case. In these circumstances, part of the community's role is to facilitate a person's access to medical care. Of course, the ubiquity, centrality, and sometimes preponderance of mental health issues in disaster situations can quickly overwhelm medical systems and emergency departments, so accessing the medical system should be practiced with circumspection.

General primary health care (PHC) settings offer the first point of contact for most surgical and medical problems. Because physical and mental health problems frequently co-

occur, especially among survivors of emergencies, persons with behavioral, psychosocial, and mental health problems may be recognized here. Indeed emergency medical settings should endeavor to properly identify mental health needs and make judicious use of adequately identified resources, including community-based resources. It is highly recommended that at least one member of each primary health care team have some capacity to deal with psychological issues and understand the available resources in the community, while maintaining a useful level of contact with these resources. The same intense overlap between physical and mental issues is encountered in treating the health consequences of human rights violations such as torture and rape.

During the response phase, community workers can provide effective mental health assistance, even while helping survivors with concrete tasks. For example, a community health worker can use skilled but unobtrusive interviewing techniques to help a survivor in sorting out demands and setting priorities while they are sifting through rubble together (10). Some forms of psychological support (i.e., very basic psychological first aid) for people in acute psychological distress do not require advanced knowledge and can easily be taught to workers who have no previous training in mental health, whether they are working in communities or within a PHC setting (see Chapter 11 on PFA).

The way in which health care is provided in these settings often affects the psychosocial well-being of people living through an emergency. Compassionate, emotionally supportive care, in keeping with the cultural norms, protects the well being of survivors; disrespectful treatment or poor communication threatens dignity, deters people from seeking health care, and undermines adherence to treatment regimes.

Ideally, mental health care should be available in most, if not all settings. However, optimal use should be made of non-specialized community resources, and when referral is necessary, PHC services should be the first line. From there, specialized mental health services can be accessed if necessary. Heavily solicited PHC and first-line health services and personnel must be able to recognize the severity of presenting problems and have clear lines of referral to easily accessed, specialized psychiatric services. However, in most cases, PHC services will do well to coordinate their work closely with community-based resources having less of a focus on acute care, thus alleviating less severe mental health problems arising in the early phases of the disaster. From this perspective, PHC becomes a coordinator of care for both less and more specialized services, and must be able to differentiate the needs of persons presenting for help.

Humanitarian aid workers can relieve help-seekers by assisting them to navigate the bureaucracy of humanitarian organizations, directing them to appropriate resources, working as liaisons between individuals and aid agencies, and advocating for appropriate services (15, 16).

Specialized medical (non-PHC) settings

Of course, things do not always happen as described above, so all health and community workers should have at least a basic understanding of mental health and psychosocial needs during and after disasters.

“In Port-au-Prince, after the 2010 earthquake, many of the PHC settings were not functioning, and specialized surgical team members or post-op teams often identified people in need of mental health interventions. One surgical unit in the neighboring Dominican Republic encountered strong emotional reactions to their operations or to being distanced from their loved ones, or still to the harrowing experience of phantom limb symptoms.

“The coordinator of one post-operative-care setting in Fond Parisien was quick to observe that survivors’ complex emotional and psychological reactions were playing a major role in delaying the discharge of patients otherwise stabilized. Many were afraid to go home to the expected devastation that had hit their families” (M.L. personal communication).

It is very important to keep in mind those people with mental health conditions prior to the disaster who needed specialized care (see Chapter 9). It is true that there are examples of persons who were successfully discharged from specialized psychiatric institutional settings following a disaster, or of persons who had received regular out-patient care prior to a disaster and were able to adopt a more community-based approach after the disaster. However, many people with mental health conditions will require continued—and sometimes increased—care after a disaster.

During disasters, it may be necessary to return persons with mental illness to their communities. Ensuring follow-up in these situations requires creative solutions and cooperation. Families, community members, and community-based emergency workers are often called upon to help follow through with the therapeutic interventions recommended by the treating teams or to ensure continued treatment with medications in order to maximize clinical stability and follow-up.

“A mental health institution was considered structurally unsafe after an earthquake. The overcrowded hospital had to be emptied, and so concerned families who came to see their hospitalized family members were asked to take their ill family member back home, and to periodically help them back for follow-up appointments. This method was effective in maintaining the stability of some otherwise quite unstable persons until more regular services could be ensured again” (M.L. personal communication).

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3. Recovery phase

From the long-term perspective, the bulk of the mental health and psychosocial work takes place in the recovery phase, following exposure to severe stressors. Recovery and the return to a level of normalcy in living circumstances will become the main focus of the majority of the affected population. In this phase, the medium- and long-term development of community-based services and social interventions will need to be deployed to its full potential.

As acute medical and surgical interventions gradually recede, community organizing can take on a longer-term role, with the goal of ensuring the long-term psychosocial well being of its members. Having stated this, readers will find that most of the approaches described below can apply in response as well as recovery phases if they can be organized.

Community organization

This is the process of bringing together community members to help them define and work toward solving their own problems (17, 18). Issues may run the gamut from practical relocation to social policy for disaster preparedness and reconstruction at the neighborhood level, to other issues of neighborhood concern.

Approaches to effective community organization

People will generally find it difficult, if not impossible, to heal from the effects of individual distress while the community around them remains in shreds and a supportive community setting does not exist (19). Thus, mental health interventions such as outreach, case finding, support groups, job groups, or advocacy groups, must be re-established in a more or less formal manner in order to assist in re-establishing linkages between individuals and groups (10, 20). These activities are described in more detail below.

This section emphasizes what can be done when communities are not able to quickly and effectively reorganize after a disaster. Many factors may contribute to this difficulty, including, the physical loss of established meeting places or respected community leaders. In these circumstances, it is essential that aid workers help to re-establish the fabric of the community they are working in, using a variety of means.

Key informants

Humanitarian workers aiming to strengthen local resources in communities they are serving will want to identify social groups or mechanisms that functioned prior to the emer-

gency and that can be revived to help meet immediate needs. These may include collective work groups, self-help groups, rotating savings and credit groups, burial societies, and youth and women's groups. Community members who are familiar with community needs can serve as 'key informants.' These informants may part of key agencies and groups in affected neighborhoods (health, social services, churches, schools, day-care providers, community groups, police, fire department, etc.), in places where people congregate (restaurants or coffee shops, bars, grocery or liquor stores, etc.), in services familiar with the neighborhood (mail delivery personnel, public utility workers, building inspectors), or in businesses or offices that survivors frequent during their recovery (thrift shops, lumber yards, hardware stores, building permit departments).

Aid workers will almost always gain from requesting an interview with key informants to ask about their perception of the type and intensity of difficulties and ways of coping in their neighborhood. They should listen to whether there are specific concerns about practical issues, specific individuals or certain families.

Identifying human resources in the local community is another important step. These resources may be found among significant elders, community leaders (including local government leaders), traditional healers, religious leaders/groups, teachers, health and mental health workers, social workers, youth and women's groups, neighborhood groups, union leaders and business leaders, political leaders, volunteer mental health practitioners, primary health personnel (such as nurses, doctors), social workers, occupational therapists, pharmacists, and those previously receiving care.

Mapping local resources

Similarly, the IASC Guidelines call for mapping local resources by asking community members about the people they turn to for support at times of crisis (13; see action sheet 2.1). Particular names or groups of people are likely to be reported repeatedly, indicating potential helpers within the affected population.

Social network analysis

A more formal analysis of the social network examines the inter-relationships of individuals and groups in a community concerning exchange of resources, information, social obligations, economic resources, and kinship ties. A thorough assessment of community needs and resource can be conducted to gain an understanding of the extent to which existing social networks fulfill these needs, and what is required to fill the gaps.



This analysis will identify problem areas and vulnerable high-risk groups, as well as permit the creation of a directory of available and appropriate resources and services. For example, social network analysis may show that a neighborhood or social group attends church frequently. In this case, mental health staff could use the clergy, church social groups, and church bulletins for distributing information about common reactions to disaster and about mental health resources.

Volunteer community support

Where local support systems are incomplete or too weak to achieve particular goals, it becomes useful and necessary to train not only community workers but also volunteers to perform tasks such as identifying and responding to the special needs of community members, developing support in a culturally appropriate way, and providing basic support (for example psychological first aid) where needed (13, action sheet 6.1).

Recruiting volunteers from the community should take certain characteristics and processes into consideration. Considerations of who recruit will yield better results by asking who the important community members are. Community workers should develop a clear notion of what they do in order to be able to train volunteers in specific tasks for limited periods of time and to offer ongoing supervision and support.

Volunteers will likely require a brief training (less than one day) to understand normal and abnormal reactions to disasters and emergencies, how to perform active listening, and how to refer to more specialized services when there is concern about someone. Humanitarian workers should have ongoing meetings for supervision and support of volunteers.

Specific community-based and self-help approaches

Community outreach

As the term suggests, community outreach actively reaches persons in need of help and support who may not otherwise seek out help within their natural community setting.

The goals of this outreach are to provide ongoing, detailed information on available resources, to reassure community members that most stress reactions are normal, and to make people aware of ways to cope with the stress they are experiencing. They also need to know whether what they are experiencing is normal and what help may be available if required. Mental health information, education, consultation, and even clinical interventions are usually well received when presented as 'normal' events that are familiar and non-threatening to the community.

Making use of information media is an effective strategy to reach out to the community. These may include radio and television announcements, articles in newspapers and community newsletters, public announcements at local events or community fairs, Internet websites, or through video programs for training and education. Posters, brochures and fliers, books, and booths can also be effective.

For community workers, knowledge of where community members gather can provide a direct means of hearing about expressed needs and helping people to access to appropriate

care. However, the worker will require strong cultural competencies to do this adequately (see Chapter 6 on this topic). Making regular visits to places where survivors may congregate, such as senior centers, recreation halls, food kitchens, or a favorite pub are good ways to meet survivors, and to inform and hear about resources and needs. The frequency of such visits must be gauged depending on an understanding of the situation and of the needs.

Outreach staff will be most effective if they are comfortable working in community-based, non-institutional roles. They must be able to adapt to changing situations, make independent decisions, and work without close supervision (20). They should be action-oriented and able to do what will be needed. Staff should be comfortable working being outside and in the elements. Workers must be comfortable and adept at striking up conversations with people they have not met before and have not come to them seeking help. It is helpful if workers live in the community, as they will have common knowledge, concerns, and topics of conversation. They must project interest and empathy. It is helpful if workers wear comfortable clothes that blend into the community. In a farming area, for example, boots and jeans might be the appropriate attire. Clothing should be appropriate to the weather, to the hazards, and to the job to be done.

An understanding of ways to help relieve stress, a level of comfort with resolving specific problems, knowledge of ‘psychological first aid,’ the ability to talk about the experience if needed, and the ability to refrain from intervention when it is not required, are all useful attributes.

Community meetings

While the topic of community meetings need not be directly related to mental health issues, the process should be tailored to help disaster recovery in several ways:

- ◆ Help people deal with concrete problems of concern to them.
- ◆ Re-establish feelings of control, competence, self-confidence, and effectiveness that were weakened by the disaster.
- ◆ Establish, re-establish, or strengthen social bonds and support networks that may have been fragmented by disaster.

As stated in the IASC Guidelines (13), “all communities contain effective, naturally occurring psychosocial supports and sources of coping and resilience. Nearly all groups of people affected by an emergency include helpers to whom people turn for psychosocial support in times of need. In families and communities, steps should be taken at the earliest opportunity to activate and strengthen local supports and to encourage a spirit of community self-help.”

As such, a community-based self-help approach is vital, because having a measure of control over some aspects of their lives promotes people’s mental health and psychosocial well being following overwhelming experiences. Affected groups of people typically have formal and informal structures through which they organize themselves to meet collective needs. Even if these structures have been disrupted, they can be reactivated and supported as part of the process of enabling an effective emergency response. Strengthening and building on exist-

ing local support systems and structures will enable locally owned, sustainable, and culturally appropriate community responses.

In this type of approach, the role of outside agencies is less to provide direct services than to facilitate psychosocial support that builds the capacities of locally-available resources. Facilitating community social support and self-help requires sensitivity and critical thinking. Communities often include diverse and competing sub-groups with different agendas and levels of power. It is essential to avoid strengthening one particular sub-group while marginalizing another, and to promote the inclusion of people who are usually invisible or left out of group activities.

Community organization can also profit from a wider approach at a macro level of outreach. For example, communities can organize and bring together local residents to deal with problems of recovery specific to the locality, increasing the community's sense of resolving its problems and helping to establish or repair social bonds and support networks among affected citizens.

The IASC Action sheet 5.2 entitled "Facilitate community self-help and social support" gives a series of recommendations for such interventions (13).

Activity groups

Group activities offer many advantages in disaster situations. Besides the obvious efficiency of having many persons participate in activities at once, there are also therapeutic advantages. One of the goals of group-based community interventions is to break isolation. Another is to experience, through others, a wider range of ways to solve problems. Yet another is the possibility that through group activities, communities can be revived or new communities can be built. Furthermore, groups can be organized and run by specialized personnel, but they can also very efficiently be run by non-specialized persons or by the affected members themselves.

Most commonly, a community organization exercise will result in a series of activities and support groups. Activities typically include recreation, singing, exercise, and large-muscle activities appropriate to age and health. These exercises can help to reduce stress and improve the spirit in the community and reestablish a sense of control and purpose. Particularly in temporary shelters, involving residents in shelter tasks (serving meals, reading to children and telling them stories, serving coffee, providing language translation, putting together a skit for entertainment, etc.) is usually more helpful than expected. Residents may help with practical activities that provide concrete help as well as opening the door to informal 'therapeutic' conversations.

Support groups

Support groups can serve useful functions in a shelter. Survivors who attend these groups find reassurance that their problems are not unique, and more importantly, that their experiences are not idiosyncratic and isolating. Hearing others' experiences and tribulations can provide useful practical ideas and resolution to particular problems. Groups provide a place

to which health staff may refer people who could benefit from some regular contact with their community.

The creation of self-help support networks consists of citizens gathering in a series of neighborhood meetings to focus on issues such as communal healing practices (see 13, action sheet 5.3), activities that promote non-violent handling of conflict (for example, discussions, drama and songs, joint activities). Other roles that groups can tackle include organizing access to information about what is happening, services, missing persons, security, etc. (see 13, action sheet 8.1), or organizing access to shelter and basic services (see 13, action sheets 9.1, 10.1, and 11.1).



Importantly, community structures and actions can be expected to be useful in the longer-term, well after the immediacy of the disaster has passed. Discussing a longer-term vision, the IASC guidelines recommend facilitating the process of community identification of priority actions through participatory appraisal and other methods (13). This can sometimes be complicated by a disaster that has disrupted known social networks and coping mechanisms, as was the case in Haiti in 2010 in the areas around Port-au-Prince. This exercise requires promoting a collective process of reflection about people's past, present, and future, thereby enabling planning. By taking stock of supports that were present in the past, but which have been disrupted in the emergency, people can choose to reactivate or recreate useful means of supports. By reflecting on where they want to be in several years' time, they can envision their future and take steps to achieve this vision.

Constructive approaches revolve around supporting community initiatives, actively encouraging those that promote family and community support for all emergency-affected community members, including people at greatest risk, determining what members of the affected population are already doing to help themselves and each other, and looking for ways to reinforce their efforts. For example, if local people are organizing educational activities but need basic resources such as paper and writing instruments, one may support their activities by providing these materials (while recognizing the possible problem of creating dependency). Ask regularly what can be done to support local efforts.

Topics of discussion for community groups may also include the following: helping at-risk groups needing protection and support (see 13, action sheet 2.1); setting up community child protection committees to identify at-risk children and to monitor risks, intervene when possible, and refer cases to protection authorities or community services (13, action sheet 3.2). It may be relevant, for example, to organize structured and monitored foster care for separated children (13, action sheet 3.2).

Beyond this, community-constituted groups become potentially powerful agents of change through advocacy. Mental health issues in particular are often difficult for individuals or even families to bring up, as in many communities, the stigma remains of being identified with mental health issues.

Safe spaces: child-friendly spaces

The term ‘safe spaces’ is understood as a means of providing people of all ages with a place and time to regain a sense of security and predictability and where activities can be organized for various community-based functions. Such safe spaces are of particular importance for children and families, and can be set up to respond to their routines, short-term, and longer-term needs, including educational ones (see 13, action sheets 5.1 and 7.1).

In these spaces, activities can be organized according to a child’s age/stage of development: 0–12/18 months (pre-verbal, not ambulatory); 12/18 months to three years; and 3–6 years (include an area for caregiver/child play and interaction in all services for younger children, such as therapeutic feeding programs, hospitals, and clinics, as well as in areas for distribution of food and non-food items); and more education-oriented activities for the 6–8-year-olds.

Support groups can be organized for parents/mothers to talk about their own issues. It is important to organize meetings at which caregivers of young children can discuss the past, present and future, share problem-solving ideas, and support one another in caring effectively for their children. During small group activities for families and their young children, parents also can learn from the interactions of others with their children. For example, after a disaster, many parents are afraid to leave a child alone or have other fears they may be unable to acknowledge. At the same time, parents are often more able to seek help on their children’s behalf or may, in fact, use their children’s problems as a way of asking for help for themselves and other family members.

It becomes possible, in safe settings, to envisage training parents, siblings, grandparents, and youth to work with available staff, and also to take learning home to their families about the healthy development of young children. Consider engaging trusted older women and female youth as volunteers in safe spaces. Include children with special needs in such activities, games, and supportive environments. (For more detailed information on child-friendly spaces see reference 21.)

Schools

In an effort to reestablish as many routine activities as possible, schools may be reopened or reactivated in specially conceived shelters. Teachers play a central role in helping children integrate the disaster and go on with their normal lives, sometimes through art and play activities, or even by encouraging group discussions in the classroom and informational presentations about the disaster. Consulting with specialists on how to best help in the classroom may be indicated. Detecting problematic behavior will often happen in this setting, so teachers also must have some understanding of mental health issues.

“In Aceh, Indonesia, where a major tsunami struck in 2004, many religious groups trusted by their communities and NGOs were able to establish schools for children with local volunteer persons ensuring the maintenance of these normalizing activities. Children felt less alone, were involved in useful activity, and families had some extra time to attend to issues relating to their own post-disaster losses and needs” (M.L. personal communication).

Self-initiated and self-help interventions

In this section, comments are limited to issues relating specifically to community and self-help interventions for vulnerable groups. See Chapter 9 for more detailed discussion on these topics.

Families: parents, caregivers and children

Disaster workers within communities can help to educate families about age-appropriate responses to disaster and help parents understand unusual behaviors that may arise in their children (for example, a child may cling more, have nightmares, or an adolescent may become more argumentative). It can have a soothing effect and improve parent-child relations if one explains that behavior, such as heightened fear of others and withdrawal, or increased fighting with other children, are common reactions to stress and reflect no failure on the caregiver’s part.

But most importantly, family units should meet—and can be helped to do so—in order to decide what to do in case of future disasters and how to protect themselves. It is also vitally important to be honest with children about what happened and the process of recovery.

Surprisingly, families and communities often do not realize the importance of empowering children, particularly adolescents, to participate in the recovery process and to help with clean up and rebuilding. For example, after the 2010 earthquake in Haiti, the ‘cash-for-work’ program gave teens opportunities to become involved while earning income for their families and for themselves. It also provided a way for them to participate and take ownership of the effort to rebuild their communities (28).

Facilitating play, nurturing care and social support for at-risk groups is not always simple to organize. Much of what has been said about community-based interventions can be applied to children and teens. Among the activities that should be privileged are parent education, home visits, shared child care and communal play groups, ‘safe spaces,’ toy libraries, and informal parent gatherings in safe spaces (see reference 13, action sheet 5.1). These may help to mitigate the negative psychosocial impact of crisis situations.

To minimize their distress, children require a sense of routine and participation in normalizing activities, which should reflect their usual daily activities.

Older persons

Findings vary in terms of the vulnerability of older persons in disasters compared with other age groups (22, 23, 24). But this should not distract from the obvious: persons who

are less mobile, more medically unstable, and more isolated are likely to be at higher risk for complications after a disaster. This is reason enough to take steps to prepare this group for the possibility of a disaster (25). Of course, any characteristics compatible with increased resilience (e.g., self-perceptions of health, etc.) will be an asset, especially in the recovery phases (24). Just as is true for other groups, older persons will have an advantage by participating as actively as they can in community events and by integrating into the available resources. Families are advised to remain involved with their older members in general, but the rewards for preventing suffering after a disaster are invaluable. Conversely, older persons who have experienced disasters in the past may have developed resiliency, which can be helpful to their families (19). See Chapter 9 for more discussion on the vulnerability of older persons in disaster situations.

The poor and persons with a lower socio-economic status

Low-income individuals generally have fewer resources or greater pre-existing vulnerabilities, realities that complicate their ability to reestablish a healthy lifestyle after a disaster. In this group, the extra stressors of losing one's work or home can lead to a profound change in the precarious balance they may have maintained prior to the disaster.

Participation in job groups and involvement in community rebuilding may afford these families a renewed place in their communities and help turn adversity into an opportunity for change in their lives. After the acute phase of a disaster, advocacy for better social conditions and better job stability can have a salutary effect.

Affluent and middle- to upper-middle class persons are not immune to suffering profound consequences after a disaster. People who may have been used to planning and controlling their lives can experience an increased sense of shock, anger, or self-blame after the disaster.

Displaced populations

Persons displaced because of a disaster will be much more disoriented in their new settings and will feel isolated from the host community unless the community can adapt its support and encourage them to take part in integration.

There are central aspects to building a supportive environment for this group and providing them with a sense of stability and safety. Among these are: taking an active role in helping the community understand the cultural and educational background of displaced persons; being proactive in understanding where they came from and why; and gathering information about the status of their families and indigenous communities.

Persons with previous mental illness

Evidence suggesting that people with prior mental illnesses perform worse during a disaster is weak. However, depending on the symptoms, different types of assistance may be needed. If they require medication, it is essential that access to a continued supply is secured in a reasonable timeframe.

Here again, assistance should be largely practical in nature with additional emphasis on helping individuals to link with appropriate mental health services, hospitals, pharmacies, or other centers distributing medications during the emergency to maintain continuity of care. These individuals can benefit from the same supportive interventions described in the section on individual interventions. See Chapter 9 for more information.

Humanitarian workers: self care

The reader of this manual is likely to be a person working in some aspect of the field of disaster preparedness, response or management. Despite an understanding of many aspects of disasters, these professionals (including yourself) are considered to be at risk for mental health problems. This is because they are more likely to be overworked, fatigued, driven to help even if they are exhausted, and spending less time with their own families. They often worry and think about the tasks at hand more than they notice their own psychological strain. They can be emotionally affected by the plight of the victims and also prone to feeling guilty for being better off than some victims they are helping.

As a group, they (and you) are more likely to have prepared for a disaster. This preparation can alleviate much unneeded stress and worry. Steps include the following:

1. Develop a plan, including an evacuation plan for your family, up date family contacts, and become familiar with organizational structure/procedures and policies in order to understand your role prior to deployment.
2. During the disaster, manage your work and rest time (consider 12 hour shifts with 12 hours off, with a full 24 hours off every 7–10 days if possible; regular breaks every 2–4 hours; try to rotate high and low-stress job activities).
3. Use time off to eat, sleep, exercise, spend time with family/friends, and engage in usual leisure/spiritual activities.
4. During the crisis, avoid alcohol, drugs, excess caffeine, and cigarettes.
5. Consider implementing a “buddy system” (formally or informally), pairing inexperienced and experienced field workers for assignments or to provide back-up replacement if needed (for example, due to sudden illness, too large a caseload, or simply a need for rest).

Humanitarian workers: supportive interventions

The same principles used for community interventions can apply, in a general way, to this at-risk population. Some ways of identifying difficulties include informal ‘roaming’ through workplaces, chatting with people and taking the ‘emotional’ pulse of a place. It is important to follow-up with individuals by making an appointment for a quick break, a cup of coffee, or a game of cards.

The ‘over-a-cup-of-coffee’ style of intervention may be vital. It is quick and is usually a comfortable way of meeting. Stress management staff should simply interact in a supportive and therapeutic manner with personnel. It has been shown repeatedly that emergency-orient-

ed staff responds best to an informal structure, engaging in interactions with stress management or mental health staff.

Interventions will usually focus on the immediate, and may include the following (10, 26, 27):

1. Ask about what is happening now and what could help right now.
2. Listen to the person's feelings and reassure him/her that these are normal under the circumstances.
3. Inform the worker that a break will help them return to work soon by providing needed rest.
4. Stress management strategies may be appropriate including: deep breathing, progressive relaxation, gentle muscle stretching exercises or 'self-talk.'
5. Diversionary activities such as playing cards or reading a magazine for a short while may help.
6. Food and beverages should be suggested if the worker has not eaten for a while.
7. After a chat, the mental health worker should allow him/her some 'breathing space.' When checking back, it can probably be determined more easily whether the worker is ready and able to return to work.
8. If the worker seems particularly tired or overwhelmed, it is appropriate to offer practical assistance in finding a replacement, obtaining transportation home, directing the worker to a rest area, or helping coordinate support (family, friends or follow-up if needed).

References

1. World Health Organization, Department of Mental Health and Substance Dependence. *Mental health in emergencies - mental and social aspects of health of populations exposed to extreme stressors*. Geneva: WHO, 2003. http://www.who.int/mental_health/media/en/640.pdf.
2. Lystad, M.H. "Human response to mass emergencies: a review of mental health research." *Emotional First Aid: A Journal of Crisis Intervention* 1985; 2(1):5–18.
3. Norris, F.H., M.J. Friedman, P.J. Watson, C.M. Byrne, E. Diaz, K. Kaniasty, "60,000 disaster victims speak: Part I and Part II. An empirical review of the empirical literature, 1981–2001." *Psychiatry*. 2002; 65(3): 207–39, 240–60.
4. World Health Organization. *Mental health assistance to the populations affected by the tsunami in Asia* [Internet] 2005 [cited 1 June 2010] http://www.who.int/mental_health/resources/tsunami/en/index.html.

5. DeWolfe, D.J. *Training manual for mental health and human service workers in major disasters, 2nd Ed.* Rockville, MD: U.S. Department of Health and Human Services, SAMHSA, 2000. <http://www.eric.ed.gov/PDFS/ED459383.pdf>.
6. Hartsough, D.M., D. G. Myers. *Disaster work and mental health: prevention and control of stress among workers.* Rockville, MD: National Institute of Mental Health, Center for Mental Health Studies of Emergencies, 1985. <http://tinyurl.com/7mj3ovo>.
7. Kalayjian A., D. Eugene. *Mass trauma and emotional healing around the world: rituals and practices for resilience and meaning-making, 1: Natural disasters.* Santa Barbara, CA: Praeger/ABC-CLIO, 2010.
8. World Health Organization and World Organization of Family Doctors (Wonca) *Integrating mental health into primary care: a global perspective.* Geneva: WHO, 2008. <http://tinyurl.com/74hr353>.
9. Inter-Agency Standing Committee (IASC). *IASC guidelines on mental health and psychosocial support in emergency settings: what should humanitarian health actors know?* Geneva: IASC. 2010. <http://tinyurl.com/2uft5hm>.
10. Myers, D. *Disaster response and recovery: a handbook for mental health professionals.* Menlo Park, California: National Center for Post-Traumatic Stress Disorder, 1994.
11. Tobias, R. "Macroeconomic implications of natural disasters in the Caribbean." Washington, D.C.: IMF Working Paper; Western Hemisphere Department, 2004. <http://tinyurl.com/83ox6j6>.
12. World Health Organization, Mental Health Gap Action Programme (mhGAP). *Scaling up care for mental, neurological and substance use disorders.* Geneva: WHO, 2008. <http://tinyurl.com/25d239e>.
13. Inter-Agency Standing Committee (IASC). *IASC guidelines on mental health and psychosocial support in emergency settings.* Geneva: IASC, 2007.
14. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). *Communicating in a crisis: risk communication guidelines for public officials.* Rockville, MD: SAMHSA, 2002.
15. Lanard, J. *Risk and crisis communication for disasters* [Internet] 2004. [cited 2 June 2010] Available from: <http://tinyurl.com/7k6bcuc>.
16. Leutz, W.N. "The informal community caregiver: a link between the health care system and local residents." *American Journal of Orthopsychiatry*, 1976; 46:678–688.
17. Peuler, J.N. *Community outreach after emergencies.* In M. Lystad (Ed.), *Mental health response to mass emergencies: Theory and practice.* New York: Brunner/Mazel, 1988.
18. Ross, M.G., B.W. Lippin. *Community organization: theory, principles, and practice.* New York: Harper & Row, 1967.
19. Erikson, K. *Everything in its path: destruction of community in the Buffalo Creek flood.* New York: Simon & Schuster, 1976.

20. Solomon, S.D. “Enhancing social support for disaster victims.” In B.J. Sowder (Ed.), *Disasters and mental health: contemporary perspectives*. Rockville, Maryland: National Institute of Mental Health, 1985.
21. Inter-Agency Standing Committee (IASC). *Guidelines for child friendly spaces in emergencies*. Geneva: IASC, 2011. Available at: <http://tinyurl.com/7ulrp5f>.
22. Ferraro, F.R., “Psychological resilience in older adults following the 1997 flood.” *Clinical Gerontologist: The Journal of Aging and Mental Health*. 2003; 26(3–4).
23. Deeg, D.J.H., A.C. Huizink, H.C. Comijs, T. Smid. “Disaster and associated changes in physical and mental health in older residents.” *European J of Public Health*. 2005;(2):170–4.
24. Cherry, K.E., J. Silva, S.L. Galea. “I: Natural disasters and the oldest-old: a psychological perspective on coping and health in late life.” In *Lifespan perspectives on natural disasters: coping with Katrina, Rita, and other storms*. New York: Springer Science and Business Media, 2009.
25. National Mental Health Information Center. *AAGP position statement: disaster preparedness for older Americans: critical issues for the preservation of mental health*. Rockville MD: Substance Abuse and Mental Health Services Administration, 2009.
26. Mayers, D. *Operational and training guide for the critical incidence stress management program*. Santa Barbara County Office of Emergency Services, Emergency Medical Services and Mental Health Department. Santa Barbara, CA: Santa Barbara County Office, 1994.
27. U.S. Department of Health and Human Services. *A guide to managing stress in crisis response professions* (HHS Publication No. SMA 4113). Rockville, MD: Substance Abuse and Mental Health Services Administration. [Internet] 2005. [cited 2 June 2010] Available from: <http://tinyurl.com/7alb6wb>.
28. United Nations. “Haitians in UN’s cash-for-work scheme earn income as they help their country.” *UN News*, 26 January 2010. Available at: <http://tinyurl.com/7omp7a3>.

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