The 2010 Haiti Earthquake Response

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KEYWORDS

- Haiti
- Earthquake
- Disaster
- Mental health
- Psychosocial

KEY POINTS

- Mental health and disorder have generally been addressed in Haiti through traditional healing practices and religion.
- The devastating 2010 Haiti earthquake highlighted a lack of preexisting formal biomedical mental health services.
- Fragmentation and poor collaboration and communication among multiple nongovernmental entities, in the context of a disempowered central government, have defined humanitarian action in Haiti, including in the health sector.
- The earthquake has been a catalyst for the identification and integration of mental health as an integral part of the post-earthquake Haitian health care system, lack of resources notwithstanding.
- Innovative care delivery models are needed to build a mental health system of care. The development of long-term services should integrate strong traditional perceptions and beliefs, religious influences, and contemporary biopsychosocial approaches.
INTRODUCTION
Background on the Pre-Event Society

On January 12, 2010, a major earthquake struck the country of Haiti, destroying its capital, Port-au-Prince as well as a significant part of southern Haiti, and causing massive casualties. Haiti is located in the American continent, in the Caribbean Ocean, occupying one-third of the island known as Hispaniola, the Dominican Republic occupying the other two-thirds. After the United States, Haiti is the second oldest independent country in the Western Hemisphere and the first black republic, where slaves revolted against their colonial masters and declared independence in 1804. While its revolutionary past serves as a source of pride, hope, and inspiration, the oppressive legacy of slavery and subsequent exploitation has continued to mark the course of a nation whose Enlightenment ideals were compromised by residual proslavery sentiment and racism. To date, the destiny of Haiti has to a significant degree been dictated by foreign powers, whether under slavery and colonialism until revolutionary independence from France in 1804 or thereafter, as a dependent peripheral state subject to the struggle of those foreign powers for ascendency in the Haitian economy.1 Since the nineteenth century socioeconomic disparities have fomented divisions between elites and peasants, as long-lasting sequelae of the colonial system.1 In this context humanitarian organizations have found a fertile ground for growth and development.

Called the “Pearl of the Antilles” in the late fifteenth century, in the years before the earthquake Haiti became the poorest nation in the Western hemisphere, with a population of 9.8 million people. Plagued by decades of political instability, social crisis, and isolation, historically Haiti has been vulnerable to natural hazards (tropical cyclones, flooding, and mudslides) but its poverty has amplified the vulnerability of its people to these events. In 2008 alone Haiti experienced 4 major storms, 1 of which killed approximately 3000 people in Gonaives. These storms together wiped out 70% of Haiti’s crops, resulting in the death of many children from malnutrition in the following months.2

Culture, Religion, and Mental Health

In 2010 the World Health Organization (WHO) and Pan-American Health Organization (PAHO) published a literature review of culture and mental health in Haiti, a useful initial reference for those unfamiliar with mental health in the Haitian context.3 Although French is an official language, the principal spoken language is Creole, used by about 90% of the people. About 50% of the population is illiterate. Religion plays a crucial role in all spheres of life in Haiti, including politics, morality, and health.3–5 Religious practices in Haiti help people to cope with psychological and emotional problems, and provide an informal system of healing parallel to the biomedical health care system.3 Religion in Haiti offers a sense of purpose, consolation, belonging, structure, and discipline, thus increasing self-esteem, alleviating despair, and providing hope.3,6 Religious and spiritual leaders have historically been trusted by the population more readily than conventional medical institutions or mental health professionals. With increasing access to more formal mental health services since the earthquake, people have started to understand the potential usefulness of such services.

Haiti is characterized by religious diversity, including Catholicism, voodoo (which combines West African traditions and Catholicism), and various Protestant traditions. Faiths have evolved in Haiti, interacting with each other and sharing key symbolic elements.3,7 The term “voodoo,” which Americans have come to think of as something dangerous or secret, refers to an important and open part of Haitian religious life.8
Voodoo in Haiti is widespread and is practiced by the majority, including among Haitians who consider themselves Catholics, and to a lesser extent among Protestants.\textsuperscript{3,9} The name voodoo comes from the word meaning \textit{spirit}. The Black Code enacted by Louis XIV in 1685 mandated the conversion of slaves to Catholicism. In an effort to hide their religious practices, which were prohibited, slaves identified their African deities with the saints of the Catholic Church. The slaves were then able to practice a strict adhesion to Catholicism while retaining aspects of their West African religion, manifesting as voodoo.\textsuperscript{3,5} With regard to health, it has been noted that the Western understanding of health, illness, and care is “anthropocentric,” with the person considered as the center of the universe, as opposed to a “cosmocentric” vision in Haiti, of the person belonging to a vast universe of spirits, ancestors, and the natural world, all of which must be in harmony for good health.\textsuperscript{3,10} This framework provides important background for consideration of the role of Western mental health concepts in the Haitian context, given that traditional belief systems can be considered an important informal (nonbiomedical) system of health care.

**Socioeconomic Status**

Haiti has suffered from a complex situation characterized by a history of foreign exploitation, high levels of rural and urban poverty with marked income inequality, strong internal divisions by class, weak governance structures, organized crime, sporadic outbreaks of violence, and alarming levels of environmental degradation.\textsuperscript{11,12} Nearly half the population lives in extreme poverty, with unemployment reaching more than 50% in metropolitan areas. Before the earthquake, Haiti was the poorest nation in the Western hemisphere, ranked 145th of 169 countries on the Human Development Index.\textsuperscript{13} Almost 70% of Haiti’s people are younger than 30 years.\textsuperscript{13} In 2003, nearly 60% of the population lived in rural areas.\textsuperscript{3} The nation’s capital, Port-au-Prince, is the largest city (estimated population 2,000,000 people) and the economic center of the country, with a large percentage of these people living in shacks and in extreme urban poverty.\textsuperscript{8} Other cities are Cap Haitien (600,000 people) on the northern coast and Gonaives (34,000 people) on the northwest coast. Life expectancy is short and infant mortality is high, about 12% of children dying before their first birthday and one-third of all children dying before their fifth birthday.\textsuperscript{8} Most houses have no running water (33% only in Port-au-Prince) with significant differentiations according to place of residence, type of housing, and level of income. Residents of rural areas generally have little access to facilities and basic services. The majority of households in Haiti do not have access to electricity, particularly in rural areas.\textsuperscript{14,15} “Brain drain” has also affected the country’s situation of vulnerability. Approximately 80% of Haiti’s university graduates have left the country, with concerns also of a brain drain from the government to nongovernmental sector within the country.\textsuperscript{16,17}

Haiti is particularly susceptible to flooding because of large-scale deforestation on the Haitian half of the island, where most trees have been cut down to make charcoal for cooking.\textsuperscript{8} Without trees to slow or stop rainfall, the water runs over the sun-baked ground, filling low spots.\textsuperscript{8} The climate of Haiti depends on season, terrain, and location, with rainfall occurring between April and November, and hurricanes with torrential rain and destructive wind a threat in the late summer and fall.\textsuperscript{8} In the recent past Haiti had been able to produce enough food to adequately feed its population, but trade liberalization, food aid, and the rice-dumping phenomenon—the importation of cheaper rice from the US rather than use of locally produced rice—have slowed farming activities, pushing peasants to leave rural areas for cities where unemployment rates have been high.\textsuperscript{18} This migration has primed the country for imminent
threat of social unrest, and has also affected the food habits of Haitians, now more used to imported food than locally produced food.

**Formal Mental Health Services**

In 2011 WHO/PAHO published an overview of mental health services in Haiti, a useful initial reference on the subject. The formal (biomedical) health care system in Haiti can be divided into 4 sectors:

1. Public institutions administered by the government Ministry of Public Health and Population (MSPP); mostly unequipped and underprovided. About 1% of the total health budget is allocated for mental health
2. The private nonprofit sector, comprising nongovernmental organizations (NGOs) and religious organizations
3. The mixed nonprofit sector, where staff is paid by the government but management is performed by the private sector, and unlikely to expand given the small budget of MSPP
4. The private for-profit sector, which includes physicians, dentists, nurses, and other specialists working predominantly in private practice or in clinics in urban centers

The MSPP is responsible for the health of the population, delivery of services, policy making, and management of the health budget, which makes up 7% of total public spending. The public sector comprises about 36% of health facilities, and most institutions are autonomous, with no networks of services. The private sector is estimated to provide one-third of the medical care in Haiti. In 2001 there were estimated to be 2500 physicians in Haiti, of whom 88% were practicing in the country’s West department including Port-au-Prince. Most people value biomedical health care services, but are unable to access care because of structural barriers such as cost, distance, and location. Given the lack of official resources allocated to health care, Haitians have learned to deal with mental health problems using different strategies common to resource-poor regions, involving traditional practitioners or religious healers as the closest and most affordable providers to cope with mental health problems. While biomedical mental health services have remained relatively undeveloped in Haiti, community-based systems of mental health care have existed for hundreds of years.

Haitian culture provides a range of explanations for illness drawing on commonly held cultural, religious, and social beliefs. A variety of explanatory models can determine help-seeking behavior and use of services. Traditional practitioner structures provide care to a significant proportion of the population. There are several types of traditional healers in Haiti who treat specific diseases or attend to general well-being: dokte fey or medsen fey (“leaf doctors” or herbalists), often treating illnesses such as colds, worms, diarrhea, and stomach ache; houngan or manbo (voodoo priests or priestesses), treating many conditions; dokte zo (“bone setters”), treating musculoskeletal conditions; pikirist (“injectionists”), administering parenteral preparations of herbal or Western medicine; and Fanm Saj (midwives), providing perinatal and natal care. Interaction between biomedical primary care and traditional or alternative care providers are not formalized; however, some cooperation between doctors and traditional practitioners exists and in some cases has been promoted, given that they sometimes treat the same patients. When faced with mental health problems, most Haitians make use of traditional practitioners or religious healers. The houngan’s major role is medical, using both an extensive knowledge of herbalism and the use of diagnostic rituals as central to healing in voodoo. Houngans search for “nonphysical” or “supernatural” causation of sickness, explained as a punishment
for failing to serve the spirits, or *loa* properly, or a curse.\(^3,21\) In general, houngans are not opposed to biomedical treatments and may refer patients whose cases are beyond their scope of expertise. It can be perceived among the population that referral decisions occur only after the client has spent money on traditional care, with the houngan perceived as exploiting the patient. The lack of alternatives, however, maintains the status quo.

Individuals use resources pragmatically, and often hold multiple or hybrid models of health and illness. As a result, the same person may seek help from multiple sources when available.\(^3\) Haitians divide illnesses generally into several broad categories, including: *maladi Bondye* (God’s disease, of “natural” origin); *maladi moun voye sou moun* (magic spells sent because of human greed, sent to punish others, or sent for revenge; a curse, spell, or hex); and those of supernatural origin, *maladi lwa* (“disease from the spirits”).\(^22\) Many Haitians also use a humoral theory of health and illness, with imbalance of hot and cold within the body believed to be the cause of natural illness.\(^3\)

These imbalances can stem from environmental elements such as rain, wind, sun, and dew, or emotional reactions to the physical environment (eg, witnessing lightning strike) or the actions of others.\(^3\) Health may be restored through the use of herbal teas, regulated diet, compresses, baths, and massages. The treatment must be in the opposite direction of the imbalance to restore equilibrium. Moderate and chronic illnesses are often treated within the family or the naturally occurring social support system. Severe illnesses such as human immunodeficiency virus (HIV) and tuberculosis were originally perceived also as a result of a curse, until people learned that biomedical treatments were effective. Since that time, perceptions have very gradually shifted such that these conditions are considered to be most effectively treated by physicians and nurses.\(^3\)

People often rely on their inner spiritual and religious strength to deal with their problems. For some people, mental health problems, problems in daily functioning, and academic underachievement are attributed to supernatural forces.\(^3\) In such cases people generally do not blame themselves for their illness or see themselves as defective. Indeed, the sense of self may even be enhanced as a curse is often aimed at a person deemed to be attractive, intelligent, and successful.\(^3\) This mechanism can avoid the burden of stigma in the community, whether from infectious disease or mental disorder. Mentally ill people may be seen as victims of powerful forces beyond their control, and thus receive the support of the community. Shame may be associated with the decline in functioning in severe mental illness, and the family may be reluctant to acknowledge that a member is ill.\(^3,23\) Mental illness is also sometimes attributed to failure to please spirits, including those of deceased family members. This external attribution may help recovery, in that people can call on the spirits to intervene on their behalf to assist healing.\(^24\) For example, the lack of proper burial and the use of mass graves following the earthquake was a phenomenon unusual in the Haitian context, but also problematic from the perspective of the experience of healthy grieving and the promotion of resilience.

At first glance it would appear that the field of psychiatry and biomedical mental health services has remained relatively undeveloped in Haiti. It has been a primarily urban phenomenon, particularly in Port-au-Prince. As in other low-income countries, before the earthquake “mental health” as defined by Western psychiatry and psychology had not been a major priority for the government in comparison with other pressing health issues such as HIV, tuberculosis, or maternal and child health. However, oversimplified conceptualizations of Haitian mental health services before the earthquake as either mostly voodoo-centric or undeveloped belie a rich and complex cultural intellectual tradition of Haitian psychiatry.\(^3,25,26\) Formal biomedical mental health
services developed historically on the initiative of Louis Price Mars and an American psychiatrist, Nathan S. Kline, who in 1959 opened the Centre Hospitalier Universitaire de Psychiatrie (University Hospital Center of Psychiatry) Mars and Kline (CHUP/MK) with the financial assistance of 3 US pharmaceutical companies, Haitian philanthropists, and the commitment of the government of President Francois Duvalier. The center was first headed by Dr Mars. A tentative plan for organization of mental health services was initiated by the neuropsychiatrist Legrand Bijoux in 1975. Although there was a time of promise for Haitian psychiatry, with the deterioration of the health system the quality of mental health care also gradually deteriorated. Despite the many initiatives of Drs Mars, Bijoux, and others from the 1940s to the 1960s to develop a mental health sector within MSPP, the country still does not have a national mental health plan or policy, or a system for monitoring and evaluation or epidemiologic research in mental health. Haiti has had no national policy or strategy for mental health despite the different sources of trauma experienced by the country over the last 10 years that relate to socioeconomic and political violence, social insecurity, recent climate phenomena, and the cholera epidemic. Following the earthquake, the MSPP interim plan for the health sector (April 2010–September 2011) did call for attention to people suffering from psychological problems. The human rights of those suffering from mental illness and of the psychiatrically hospitalized have not been adequately protected by law. Reliable data on the prevalence of mental disorders in Haiti are still not available.

Human resources in mental health were scarce prior to the earthquake, although there remains a lack of clarity on the exact number of providers. A 2003 WHO/PAHO report counted 10 psychiatrists and 9 psychiatric nurses working in the public sector, although recent reports have suggested higher numbers. Moreover, these professionals mostly work in Port-au-Prince, to which people must travel to receive formal mental health services. The formal mental health system has suffered from this overcentralized and underresourced system. There are 2 psychiatric hospitals in and near Port-au-Prince, CHUP/MK and Beudet, both of which were in a dilapidated state both before and after the earthquake. Between them there are approximately 180 (60 + 120) hospital beds in total. Both were damaged extensively during the earthquake, reducing their operational capacity. The distribution of diagnoses observed in the psychiatric hospitals has been estimated at: schizophrenia (50%), bipolar disorder with mania (30%), other psychoses (15%), and epilepsy (5%). These figures are no different from those of hospitalized patient populations in other countries, and give no idea of the real prevalence of these disorders in the community. Generalist physicians are able to prescribe psychotropic drugs; however, no national formulary or treatment protocols for mental disorders exist. Formal training is also limited. As a result, generalist physicians have been reluctant to prescribe medication and prefer to refer patients to the 2 psychiatric centers for care. The availability of follow-up care in the community is very limited. In the nation’s second-largest city of Cap Haitian, it has been reported that psychiatric services are limited to a monthly visit by a psychiatrist from Port-au-Prince.

THE EARTHQUAKE

Event Details

On January 12, 2010 a 7.0-magnitude earthquake struck near Port-au-Prince, with strong effects felt within a 40-mile radius and the entire nation physically shaken. At least 220,000 people were killed, with more than 300,000 injured and 1.5 million displaced and homeless. More than 105,000 homes were destroyed.
and 188,000 houses were badly damaged. In Port-au-Prince, 25% of civil servants died, and 60% of government and administrative buildings and 80% of schools were destroyed, including 28 of 29 government ministries (Fig. 2). Sixty percent of schools in the South and West Departments were also destroyed or damaged. Many of the 1.5 million displaced moved to establish makeshift tents, with more than 100,000 at critical risk of storms and flooding. Around Port-au-Prince internally displaced person (IDP) settlements began to develop within days of the disaster (Figs. 3 and 4). Although not directly related to the earthquake, the cholera outbreak of October 2010 caused additional challenges to aid. In 2011 the source of the cholera outbreak was traced to a United Nations (UN) battalion from Nepal (Fig. 5). Nine months after the outbreak, approximately 6000 people had died and more than 200,000 were infected. This marks the worst cholera outbreak in recent history, as well as the best-documented cholera outbreak in modern public health. By 2012, 7700 people had been killed and 620,000 infected, with only 17% of Haitians having access to improved sanitation and clean water, conditions that fuel the spread of the disease.

Post-Earthquake Response

Mental health needs
In the acute aftermath of the earthquake there was little capacity, within either the government services or humanitarian sectors, to evaluate immediate mental health impact and response. In the weeks and months following the earthquake several groups began to be identified as being particularly vulnerable to mental health problems. These people included survivors, those who sustained physical injuries and amputations, IDPs, children in need of protection, and those at risk of gender-based violence. The earthquake’s effects extended to those who had preexisting mental disorder, those with significant prior histories of loss and trauma, those living in the Haitian diaspora, and health care providers and others who responded to the earthquake relief effort and continued to provide ongoing services in IDP settlements, hospitals, clinics, and communities (Fig. 6). The 2 psychiatric hospitals suffered significant damage. Perimeter walls at CHUP/MK collapsed, with some patients leaving the hospital and wandering the neighborhood; however, the hospital’s psychiatrist set up emergency outpatient services for those presenting to the hospital, and worked courageously to support those in need of services and living temporarily on the hospital grounds (Fig. 7). By the end of 2010 approximately 1.3 million people were displaced, including 380,000 children, spread across more than 1300 settlement sites. Many had been seriously injured in the earthquake and required ongoing medical services.

Mental health response
Immediate psychosocial assistance activities and mental health services were largely performed by NGOs and the small number of mental health professionals in the country. In the weeks following the earthquake, efforts were made to organize mental health and psychosocial responses of NGOs working in Haiti in collaboration with the Haitian government and under MSPP through the UN Cluster approach, and in accordance with the Sphere Standards and the recommendations of the Inter-Agency Standing Committee (IASC) (Box 1).

In 2007 the IASC developed a set of guidelines for mental health and psychosocial response in complex emergencies based on a “do no harm” approach, which served as a point of reference for organizations responding to the earthquake in Haiti. Initial response efforts included organization of religious mourning ceremonies, the application of “psychological first aid”, and mobilization of resources and personnel
Fig. 1. United States Agency for International Development map. (A) Earthquake-affected areas and population movement in Haiti. (B) US Government humanitarian assistance to Haiti for the earthquake. A larger version of these maps is available at www.psych.theclinics.com. Courtesy of US Agency for International Development (http://www.usaid.gov/).
Fig. 1. (continued)
Fig. 2. Presidential palace, Port-Au-Prince (February 2010, G. Raviola). Haiti’s National Palace, completed in 1920, was severely damaged in the earthquake, and razed in 2012.

Fig. 3. Port-au-Prince aerial view (March 2010, G. Raviola). A view of Port-au-Prince from Petionville, Haiti. Soon after the earthquake, open spaces in Port-au-Prince became occupied by tented camps known as internally displaced person (IDP) settlements.
to support those in extreme distress (Figs. 8 and 9). Responding organizations provided a range of services in the immediate emergency and the months following.

Within MSPP a Haitian national mental health authority was appointed to coordinate government activities on policy, mental health legislation, and the planning of services, as well as to direct the cluster. WHO and PAHO engaged in a role of support to the government and this authority, with the aim of advising on mental health policy, assisting in planning and coordination of responses, monitoring the quality of outside technical assistance, and helping to assist with reconstruction to build a sustainable national mental health service capacity and resource mobilization.

Fig. 4. IDP settlement (February 2010, G. Raviola). The Parc Jean Marie Vincent IDP settlement, Port-au-Prince, Haiti. Those living in IDP settlements have been vulnerable to illness, violence, rains, and flooding.

Fig. 5. UN presence (February 2010, G. Raviola). A UN armored vehicle outside a UN compound in Port-au-Prince.
Fig. 6. University hospital (February 2010, G. Raviola). The nursing school at the university hospital in Port-au-Prince collapsed.

Fig. 7. Psychiatric hospital (February 2010, G. Raviola). The Centre Hospitalier Universitaire de Psychiatrie (University Hospital Center of Psychiatry) Mars and Kline (CHUP/MK), Port-au-Prince, Haiti.
Mental health services
Following the earthquake it was recognized by the Haitian government that mental health had been a neglected area (Alex Larsen, Minister of Health, personal communication, February 2010). The need for mental health services was noted in the MSPP 2010–11 interim health plan.27 Shortcomings in the educational system for physicians and nurses as well as in the training of specialists were also recognized. Estimates of mental health staffing in the country in 2011 included 194 psychologists (either undergraduate or graduate levels), 82 social workers, 27 psychiatrists (either indigenous or

Box 1
IASC, OCHA, and Sphere: coordination of emergency response in disasters

The IASC, created in 1992 by the UN, has served as an interagency forum for coordination, policy development, and decision making involving key UN and non-UN humanitarian partners. The UN Office for the Coordination of Humanitarian Affairs (OCHA) was created in 1998 to assist governments in mobilizing international assistance when the scale of a disaster exceeds national capacity. OCHA manages several tools to facilitate coordination of multiple actors and resources through the UN Cluster approach, a forum of the most experienced relief agencies. Its aim is to strengthen partnerships and ensure more predictability and accountability in international responses to humanitarian emergencies by clarifying the division of labor among organizations and better defining their roles and responsibilities within the key sectors of the response. Initiated in 2000, Sphere describes a set of Minimum Standards to be attained in disaster assistance in each of 5 key sectors: water supply and sanitation; nutrition; food aid; shelter; and health services. Sphere includes indicators for mental and social aspects of health. Questions remain regarding the scientific evidence for particular interventions.

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Fig. 8. Zanmi Lasante mourning (February 2010, G. Raviola). A Zanmi Lasante ceremony in Cerca La Source, Haiti. Religious mourning ceremonies were an important post-earthquake intervention to support grieving.
expatiate), 14 general practitioners trained in provision of mental health care, 3 psychiatric nurses, and 1 neurologist. Of the psychiatrists, the majority were engaged in private practice or NGOs, with the remaining working in the public sector. This analysis is complicated by the fact that a number of NGOs also work to strengthen the public sector. Help-seeking behavior with regard to mental health care has continued to be determined largely by practices existing before the earthquake, with self-referral to a diverse array of traditional and urban healers, and less commonly to biomedical mental health services. The significant influx of foreign clinicians and religious missionaries from a wide array of organizations highlighted the lack of regulation over the safety and quality of interventions, either foreign or local (Fig. 10). Broadly, over time services offered by nongovernmental entities included community education and awareness campaigns, psychosocial assistance, mourning, and group support for grief or emerging problems such as cholera, training of physicians and nurses in mental health care, individual psychotherapy and psychopharmacology, and complementary therapies such as acupuncture. Depending on the organization, there existed a range of services and provider types, both local and foreign, across nonspecialist care, social work, psychology, and psychiatry (Table 1).

Over 2010 to 2011, through collaboration between MSPP, PAHO, nongovernmental partners, and key partners, there was increased momentum toward articulation of a policy and national strategy for mental health. Planning meetings were organized by the MSPP authority. However, elections with shifts in political leadership, and the shifting of commitments by NGOs, to both Haiti and mental health, have presented challenges in sustaining the process. A working group composed of representatives from MSPP, the psychiatric hospitals, local and international NGOs, and WHO/PAHO was convened through the cluster in the second half of 2010 with the goal of establishing initial steps toward a national policy and plan for mental health. In-country advisory representation of WHO/PAHO to MSPP on mental health was supportive to that process.

Today, however, there remains no mental health plan and policy, and mental health legislation is not yet well defined. Mental health services are not covered for most

Fig. 9. Zanmi Lasante IDP clinic (February 2010, G. Raviola). A Zanmi Lasante clinic tent in Parc Jean Marie Vincent, Port-au-Prince, Haiti, where a psychologist provides direct clinical services. Nongovernmental organizations delivered clinical services in the IDP settlements.
Haitians, except for those who can afford insurance systems. Although 30% of the population has access to free psychotropic medication available generally through private sector donations, the cost of 1 day of treatment for antipsychotic and antidepressant medication is prohibitive for a national income average of US$2 per day.\textsuperscript{14} Regarding outpatient care, few services are provided, the majority by NGOs.\textsuperscript{14} There is no specific outpatient or inpatient care for children and adolescents. Day-treatment facilities or residential services integrated with community psychiatric hospitalization do not exist.

**IMPLICATIONS**

**Coordination and Collaboration: Emergency Response**

Postdisaster settings pose substantial challenges for rapid emergency response, including for mental health and psychosocial needs. This is particularly so in contexts of very limited resources, fragmented governance, and lack of pre-event formal mental health infrastructure, as existed in Haiti. Globally a particular challenge has been the coordination of interventions by local and foreign NGOs, groups, and individuals in implementing safe and culturally relevant practices. Regarding mental health, experience has shown the importance of providing culturally and contextually sensitive, integrated, and coordinated interventions informed by qualitative and quantitative assessments of needs, urgency, and resource availability.\textsuperscript{57} In Haiti specifically, since the earthquake challenges have been documented broadly in the functioning of humanitarian mechanisms, including: introduction of the UN Cluster process in an exclusive, top-down manner in disregard of local context and existing coordination structures, potentially undermining local ownership and coordination of humanitarian, reconstruction, and development initiatives with Haitian civil society groups; weak
Table 1
Mental health and psychosocial support in Haiti at 8 months

<table>
<thead>
<tr>
<th>MHPSS Activity</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Individual psychological support</td>
<td>ACF, ADRA, AVSI, CW, HI, IMC, MdM-C, MdM-Fr, MdM-Sp, MSF-Bel, MSF-H, MSF-Sp, PIH/ZL, PsF, WVV</td>
</tr>
<tr>
<td>Group psychological support/counseling</td>
<td>ACF, AVSI, CW, HI, IMC, IOM, MdM-C, MdM-Fr, MdM-Sp, MSF-Bel, MSF-H, MSF-Sp, PIH/ZL, PsF</td>
</tr>
<tr>
<td>Psychotropic medications</td>
<td>IMC, MSPP, PIH/ZL</td>
</tr>
<tr>
<td>Psychotherapy</td>
<td>ACF, CW, IMC, MSF-Bel, PIH/ZL</td>
</tr>
<tr>
<td>Other psychological/psychiatric support</td>
<td>IMC, SI</td>
</tr>
<tr>
<td>Case management/social work</td>
<td>IMC, MdM-C, MdM-Fr, MSF-Bel, MSF-H, MSF-Sp, PIH/ZL, PsF</td>
</tr>
<tr>
<td>Child-friendly spaces</td>
<td>ACT, ADRA, AVSI, FfH, IMC, IOM, MDM-Fr, PIH/ZL, PI, StC, SI, Tdh, UNICEF</td>
</tr>
<tr>
<td>Including psychosocial consideration in Protection activities</td>
<td>ADRA, IMC, IOM, MdM-Fr, PIH/ZL, PI, PsF, TdH</td>
</tr>
<tr>
<td>Facilitating conditions for community mobilization</td>
<td>FfH, MdM-Fr, MdM-Sp, PIH/ZL, PsF, TdH, UNICEF</td>
</tr>
<tr>
<td>Vocational training and livelihood assistance</td>
<td>ACF, PIH/ZL</td>
</tr>
<tr>
<td>Advocacy</td>
<td>TdH</td>
</tr>
<tr>
<td>Providing information to the community</td>
<td>ACF, AVSI, FfH, IOM, MdM-C, MdM-Fr, MdM-Sp, MSF-Bel, MSF-H, PIH/ZL, PsF, TdH, VR</td>
</tr>
<tr>
<td>Supporting teachers’ psychosocial well-being and training</td>
<td>AVSI, MSF-Bel, PIH/ZL, PI, SI, Tdh, UNESCO</td>
</tr>
<tr>
<td>Social considerations in nutrition, and WATSAN</td>
<td>ACF, ADRA, AVSI, FfH, IOM, PI, SI, Tdh, UNICEF</td>
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<tr>
<td>Other social support</td>
<td>TdH</td>
</tr>
<tr>
<td>General activities to support MHPSS</td>
<td>HI, IMC, RCF, IOM, MdM-Sp, MC, PsF, SI, UNICEF, WVV</td>
</tr>
</tbody>
</table>

Reporting members: Action Contre la Faim France (ACF), Lutheran World Federation—ACT (ACT), Adventist Development and Relief Agency (ADRA), Ananda Marga Universal Relief Team (AMURT), Association of Volunteers in International Service (AVSI), Christian Blind Mission (CBM), Comité de la Cour des Enfants de Quettstar (COCEQ), Concern Worldwide (CW), Christian Relief Fund (CRF), Food for the Hungry (FfH), Haitian Red Cross/Red Crescent Movement (HRC), Handicap International (HI), International Medical Corps (IMC), International Organization for Migration (IOM), Médecins du Monde Canada (MdM-C), Médecins du Monde France (MdM-Fr), Médecins du Monde Spain (MdM-Sp), Médecins Sans Frontieres Belgium (MSF-Bel), Médecins Sans Frontieres Holland (MSF-H), Médecins Sans Frontieres Spain (MSF-Sp), Médecins Sans Frontieres Suisse (MSF-Su), Mercy Corps (MC), Ministère de la Sante Publique et de la Population, Haiti (MSPP), Partners in Health/Zanmi Lasante (PIH/ZL), People in Need (PiN), Plan International (PI), Pharmaciens Sans Frontieres Comité International (PsF), Red Cross France (RCF), Red Cross Holland (RCH), Save the Children (SC), Start International (SI), Terres des Hommes (TdH), United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Children’s Fund (UNICEF), Viva Rio (VR), World Vision (WV).

Abbreviations: MHPSS, Mental Health and Psychosocial Support Network; WATSAN, water and sanitation.

intercluster coordination and predictable leadership regarding multisectoral and cross-cutting issues; and poor communication between the cluster approach and broader humanitarian coordination efforts, with limited emphasis on participatory approaches or accountability toward affected populations.\textsuperscript{11,58,59} Given also the profound lack of preexisting medical services, the fragmentation of health care delivery among a large number of NGOs, and the absence of formal mental health services, to some degree ineffective coordination in the planning and delivery of mental health and psychosocial services in the immediate disaster setting would unfortunately be inevitable; this despite the laudable effort to organize activities through the UN Cluster under the leadership of MSPP, also in accordance with the UN IASC guidelines. The guidelines were useful in framing initial action within a pragmatic, do-no-harm, human rights–based approach.\textsuperscript{54} Although they emphasize the importance of securing the engagement and participation of local leaders and experts across disciplines, in practice this sometimes did not occur in the Haiti situation, nor was there a template for long-term planning for sustainable services. In the future, better systems are needed for the on-the-ground guidance of emergency mental health and psychosocial response, and facilitation of the transformation of short-term to long-term response.

\textbf{Coordination and Collaboration: Long-Term Service Planning}

Such complexity and challenge has tended to only aggravate the tendency to approach postdisaster needs in an episodic fashion with deployment of external resources, rather than as an opportunity to build local capacity and purposefully lay the groundwork for sustained delivery with attention to building the foundation for services and long-term development. The earthquake also exposed a public-sector mental health system in disrepair.\textsuperscript{60,61} Several efforts have sought to support more sustained capacity in the country over time, building on and within accepted primary health care structures. Through the integration of plural local belief systems, pragmatic use of existing and emerging evidence-based practices, and adaptation of existing primary care and community-based care models, there is opportunity to attempt to develop continua of care incorporating culturally relevant psychoeducation for the wider community, psychosocial support for those in distress, and a range of appropriate clinical services for the more severely affected and mentally ill.\textsuperscript{62–64} One example of such an effort has been undertaken by Partners In Health/Zanmi Lasante (PIH/ZL).\textsuperscript{12} The presence of the PIH/ZL health care system in Haiti over the past 25 years, serving approximately 1.2 million people in Haiti’s Central Plateau and Artibonite Valley and providing hospital and community health worker-based care for HIV and tuberculosis, has offered a unique platform that could be a foundation on which to build a similar integrated system of mental health care. ZL had taken steps before the earthquake to provide psychosocial services to certain high-need medical populations, and thus had in place several social workers and bachelor’s-level psychologists who formed the base on which to mount a more comprehensive, integrative community-based strategy with limited resources. ZL identified and adopted a specific, evidence-supported planning and implementation framework to guide its efforts, currently under way and supported by Grand Challenges Canada, for scaled integrated mental health care throughout its system to take advantage of that foundation for long-term capacity in the context of a short-term disaster response.\textsuperscript{64} It is hoped that the use of such deliberate and structured efforts, among others, can in the future collectively support the establishment of a decentralized, community-based system led by the government across Haiti’s 10 departments. Doing so will require providers and actors to engage community health centers and community health workers, encourage associations of users and families, and support mental health services offered at district hospitals and at a small
number of higher-quality psychiatric facilities in order to support and anchor a community-based foundation. A commitment to establishing a national policy and strategic plan for mental health will also need to be sustained, by both the government and other partners.

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