

## Severe mental disorders in complex emergencies

Lynne Jones, Joseph B Asare, Mustafa El Masri, Andrew Mohanraj, Hassen Sherief\*, Mark van Ommeren

*Lancet* 2009; 374: 654–61

International Medical Corps  
Santa Monica, CA, USA  
(L Jones OBE, MRCPsych); Accra,  
Ghana (J B Asare GM, FRCPsych);  
International Medical Corps,  
Gaza Strip, Occupied  
Palestinian Territory  
(M El Masri MD); CBM Aceh  
Psychosocial Rehabilitation  
Programme Provincial Health  
Office, Banda Aceh, Indonesia  
(A Mohanraj MBBS); Karamara  
Regional Hospital, Jijiga,  
Somali Region, Ethiopia  
(H Sherief MD); and  
Department of Mental Health  
and Substance Abuse, WHO,  
Geneva, Switzerland  
(M Van Ommeren PhD)

\*Dr H Sherief died in July, 2009

Correspondence to:  
Dr Lynne Jones, University of  
Cambridge Developmental  
Psychiatry, Douglas House, 18b  
Trumpington Road, Cambridge  
CB2 8AH, UK  
ljones@imcworldwide.org

People with severe mental disorders are a neglected and vulnerable group in complex emergencies. Here, we describe field experiences in establishing mental health services in five humanitarian settings. We show data to quantify the issue, and suggest reasons for this neglect. We then outline the actions needed to establish services in these settings, including the provision of practical training, medication, psychosocial supports, and, when appropriate, work with traditional healers. We have identified some persisting problems locally, nationally, and internationally, and suggest some solutions. Protection and care of people with severe mental disorders in complex emergencies is a humanitarian responsibility.

### Introduction

In the summer of 2004, Ahmed was half naked, incoherent, and chained to a tree on the outer edges of a camp for Darfur refugees in Chad, exposed to the blistering sun without shelter, and surrounded by a thorn fence to keep the cattle away (figure). Traditional healers had identified him when asked by a humanitarian agency if they knew people needing treatment for mental illness. Ahmed had first become ill 14 years before, in his early 20s, in Darfur. He had developed delusional ideas about his failure to get funding to continue his education and had become preoccupied with the belief that he had been tricked. He was often violent and sometimes mumbling and incoherent. The illness took a relapsing course and sometimes his aggression was such that he was restrained by his family. The family had sought assistance from a local traditional healer but it did not help. In 2003, he was calm but the conflict in Darfur disturbed him greatly, and he became aggressive and preoccupied again. When the family members fled from the militias, he refused to go with them, so they bound him to bring him with them.

At the camp, tents were allocated one for each family, not to individuals; therefore, the family had no solution but to chain him outside and provide food and water, which he often refused. Ahmed was diagnosed by the first author as having a paranoid psychosis and was treated with antipsychotic medication. The general practitioner from Chad, running the primary health-care service in the camp, the family, and one of the traditional healers received on-site teaching as part of a continuing mental health training programme to understand Ahmed's illness and how to treat him. Furthermore, one agency was persuaded to provide an appropriate individual shelter for him near his family. Within a week, Ahmed was calmer and able to communicate intelligibly with his family and health workers. Within a month, he was unchained and continued to be supported by the primary health-care team.

Ahmed's story illustrates the problems that families and patients with severe mental disorders face in humanitarian settings. They are often individuals with long-term, untreated illnesses exacerbated by conflict, flight, or disaster. Families, when being courageous and compassionate in bringing the sufferer with them as they

flee, are then faced with inadequate shelter, absence of appropriate care, and are forced to restrain their ill relative by whatever means available, which results in further deterioration. Basic health-care facilities usually lack the appropriate medications and staff trained to use them, so those previously on medication are likely to relapse.<sup>1</sup>

Ahmed was lucky to have a family that wanted to care for him. Many ill people are abandoned by their relatives during flight. They are thus deprived of the networks of support and protection that could have enabled them to function. Verbally and physically abused, stoned, or beaten, people with mental disorders wander terrified, unfed, in rags, usually hobbled by some kind of chain, in all refugee camps. They are particularly vulnerable to the dangers of life in a conflict area or as refugees, failing to recognise orders from armed authorities (panel 1). To be displaced by war or disaster is to be dispossessed; to be displaced in such circumstances and suffer from a severe mental disorder is to be among the most dispossessed people in the world.

### Complex emergencies and humanitarian settings

Complex emergencies are usually defined as situations in which there is extensive violence and loss of life; massive displacements of people; widespread damage to societies and economies; the need for large-scale, multi-faceted humanitarian assistance; and obstructions to such assistance by political and military constraints, including security risks for the relief workers themselves.<sup>2</sup> The term humanitarian setting is increasingly used to include a wide range of conflict, post-conflict, and disaster-affected areas where normal services are disrupted or insufficient to meet the needs of a dislocated population, and where national and international agencies working together requiring coordination are likely to exist.

Over the past 20 years, the humanitarian approach to mental health issues in complex emergencies has been debated and critiqued.<sup>3–7</sup> This debate has resulted in a gradual shift away from programmes—the primary focus of which is individual traumatic responses—to an increased emphasis on psychosocial support as a cross-cutting issue, and the provision of culturally



Figure: A man with psychosis chained to a tree in a refugee camp in Chad

appropriate social and community supports combined with care for people with severe mental disorders. This is exemplified in new international, interagency guidelines.<sup>8</sup> However, although several agencies have recognised the need to create services specifically for those with severe mental disorders,<sup>9–12</sup> these sufferers still remain a neglected and stigmatised group. For example, most psychosocial agencies working in tsunami-affected areas in 2005 focused on immediate traumatic responses.<sup>13,14</sup>

Five authors of this report have worked for an international non-governmental health organisation—International Medical Corps. This report draws on their experiences in the establishment of mental health services in five humanitarian settings to investigate the issues and solutions required to address severe mental disorders in such contexts.

The settings show the wide range of situations encompassed. In eastern Sierra Leone, a population of mainly ex-combatants and returning refugees is recovering from a vicious 15-year civil war, characterised by atrocities against civilians and forced recruitment of children. Eastern Chad has been host since 2004 to about 250 000 Darfurian refugees who had fled brutal attacks on their communities in western Sudan. In Aceh, Indonesia, after 30 years of armed conflict, the 2004 tsunami took 131 000 lives, displaced 400 000 people, and

disrupted the economy and infrastructure of the entire province. The 2005 earthquake in Pakistan and India left 80 000 dead and 3 million people homeless; half of whom continued to live during winter in remote destroyed villages. The impoverished Somali region of Ethiopia has hosted almost 30 000 refugees, 17 000 of whom arrived recently, having fled civil war and famine in Somalia. All these emergencies have taken place in areas beset with long-term chronic conflict, poverty, and marginalisation.

### The size of the problem

The extent of the problem is uncertain because little epidemiological work has been done in these settings. A recent study of 1043 hurricane survivors from Louisiana, Mississippi, and Alabama in the USA found that the number of people with serious mental illness doubled after the storm.<sup>15</sup> A national epidemiological study done before the 2006 conflict in Lebanon—yet in the aftermath of more than 20 years of civil war—showed that 4·6% of people had a severe mental disorder (bipolar disorder, severe forms of depression, or anxiety disorders) in the previous 12 months.<sup>16</sup> A survey of 1544 adults in Timor-Leste found a Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV) point prevalence estimate of clinically relevant mental disorders of 5·1% (including psychosis, 1·4%). Psychotic disorders were reported to be the most disabling.<sup>17</sup>

International Medical Corps community-based mental health services are audited. The table shows data from a clinical audit of mental health consultations done in primary-health-care-based mental health clinics using a simple data-collection sheet completed at first and last visit.

Despite services being established in different contexts, severe disorders (especially epilepsy and psychosis) were common in those presenting with neuropsychiatric problems (table). In Aceh (Indonesia), Pakistan, and Ethiopia, patients presenting at the clinics with psychotic disorders outnumbered patients with stress-related disorders, in spite of high rates of exposure to the stresses of tsunami, earthquake, and long-lasting conflict, respectively. Among Somali refugees attending a newly established service in a new camp in Ethiopia, schizophrenia was especially common (31% of all cases).

In populations coming from, or living in, war-affected or remote rural areas that have been without health care for many years (such as Somalia, Liberia, Sudan, or the border of Pakistan), the number of people seeking help is likely to initially increase as people access services for the first time. The high proportion of people with severe disorders in Sierra Leone is probably because those with mild symptoms attended a counselling programme in the community. In all countries, the longer services continued, the greater numbers presented, as word spread of the availability of effective treatment. Mental health services in these contexts attract people with epilepsy because local populations incorrectly categorise

#### Panel 1: Kosovo, 1999

Agron suffered from a long-term paranoid psychosis and was cared for by his family in a rural village in Kosovo. He received antipsychotic medication, although he remained delusional, and lived quite comfortably in a small hut in the garden of the villa belonging to his extended family. He was unchained but preferred this accommodation because it allowed him to pace up and down. When Serb forces arrived at the village in spring 1999, the family fled but could not persuade Agron to go with them. He was shot in his bed and was discovered when his family returned to the village 2 months later.

	ICD-10 code	Sierra Leone, November, 2004–March, 2005	Chad, July, 2005–March, 2006	Aceh, March, 2005–December, 2005	NWFP, December, 2005–May, 2006	Somali region, January, 2008–April, 2008
Dementia	F-00-F03†	2	9 (3%)	5 (1%)	1	1 (2%)
Organic brain syndrome	F 06†	0	0	2	5 (2%)	0
Substance dependence	F 12.2†	0	0	2	0	0
Substance-induced psychosis	F 12,5†	5 (3%)	1	5 (1%)	1	0
Schizophrenia, schizotypal, and delusional disorders	F 20–23†	10 (5%)	12 (4%)	85 (18%)	14 (6%)	20 (31%)
Other non-organic psychotic disorders	F 28†	35 (17%)	0	0	2 (1%)	0
Bipolar disorder, manic episode, psychotic depression	F 30–31,32.2†	8 (4%)	7 (2%)	11 (2%)	10 (4%)	4 (6%)
Depression‡	F 32	5 (3%)	47 (13%)	120 (25%)	92 (38%)	12 (18%)
Neurotic and somatoform disorders	F41–42;F44–49.3	1	35 (10%)	41 (9%)	5 (2%)	3 (5%)
Reaction to severe stress and adjustment disorders	F43.1–43.2	0	39 (11%)	92 (19%)	6 (3%)	4 (6%)
Mental retardation	F70–F79†	4 (2%)	38 (10%)	9 (2%)	13 (5%)	6 (9%)
Developmental disorders including PDD	F80–85†	0	3 (1%)	3 (1%)	3 (1%)	1 (2%)
Epilepsy	..†	122 (60%)	97 (27%)	14 (3%)	46 (19%)	4 (6%)
Others	..	1	42 (12%)	2	6 (3%)	1 (2%)
No psychiatric diagnosis	..	0	26 (7%)	49 (10%)	27 (11%)	8 (13%)
Information unavailable	..	11 (6%)	0	43 (9%)	12 (5%)	0
Severe neuropsychiatric disorders	..†	186 (91%)	167 (47%)	136 (28%)	95 (38%)	37 (55%)
Total	..	204 (100%)	356 (100%)	483 (100%)	243 (100%)	64 (100%)

Data are numbers (%). ICD-10=International Classification of Diseases, 10th revision. NWFP=North-West Frontier Province. PDD=pervasive developmental disorder. \*Percentage figures have been rounded up. †These rows indicate severe mental disorders. ‡Depression indicates mild, moderate, or severe non-psychotic depression.

Table: ICD-10 diagnoses of cases at community-based emergency mental health clinics in five humanitarian settings\*

epileptic people as having a mental disorder and stigmatise them in similar ways. Many also have mental health sequelae of epilepsy, such as hypoxic brain damage and behavioural disturbance.<sup>12</sup>

The table shows categories of disorder that might be reliably assessed,<sup>18</sup> but little information is available about their construct or diagnostic validity,<sup>19</sup> especially in non-western cultures.<sup>20–22</sup> Improvement of the validity of available diagnostic systems remains a matter of years of research. However, people with severe mental illnesses in emergencies cannot wait, and the International Classification of Diseases (ICD) provided a pragmatic guide to rational decision making regarding interventions for these severe disorders, as well as a way to communicate with mental health professionals. For the purposes of communication with service users, an issue-focused approach was taken, mostly working with terms used by patients to describe the problem. All five settings recognised categories equivalent to the psychotic disorders, such as *out-of-head* in Creole in Sierra Leone, *poongo* in Acehnese, and *waa lan* in Somali.

Political reasons for neglect of those with severe mental disorders in low-resource settings have been well documented.<sup>23</sup> Lack of resources, different conceptions of what constitutes a medical problem, different help-seeking mechanisms, therapeutic nihilism, and stigma that results in families hiding sick relatives add to the difficulties. In humanitarian settings, all these problems are exacerbated: existing host-country facilities might be damaged, insufficient, and inaccessible. Emergency-care providers have

minimal training in the recognition and management of mental disorders, prioritise infectious and acute conditions, and often do not want to deal with people with mental illness. International Medical Corps was initially unable to find a candidate for a community mental health officer in eastern Sierra Leone, in spite of the offer of training and a good salary, because public health workers feared being seen as *out-of-head* themselves. Until a few years ago, the international humanitarian community limited mental health training to identification and response to traumatic stress. National and international data collection systems in humanitarian settings have also failed to provide specific categories for severe neuropsychiatric disorders,<sup>11</sup> leaving them to be lumped under Mental Disorder (unspecified)<sup>10</sup> or Other, thus contributing to their neglect.

When patients remain in institutional care in conflict and disaster areas, they face other challenges.<sup>24</sup> Old institutions on the peripheries of cities are often on front lines and especially vulnerable to attack. Staff members are likely to flee and leave patients without food, water, medication, or power, subject to abuses from each other and from occupying forces.<sup>25</sup> Alternatively, severely disturbed and dangerous patients might be released, endangering other patients and the public. Records are destroyed, making family tracing and continuing care difficult.

### Setting up services: actions needed

The framework of action in panel 2 is now the recommended set of minimum interventions for people with

### Panel 2: Minimum actions needed to address severe mental disorders in humanitarian settings

- Assess existing services and identify people in need
- Build a relationship with traditional healers and facilitate the use of supportive traditional healing methods where appropriate
- Initiate rapid supervised training for emergency primary health-care staff
- Avoid the creation of parallel mental health services focused on specific diagnoses or narrow groups
- Establish an accessible advertised service and referral systems, including referrals to social and community resources
- Ensure sustainable supplies of essential psychotropic medication
- Provide biological, psychological, and social interventions to relieve symptoms, provide protection, and restore function
- Educate and support existing carers
- Work with local community structures and groups to enable protection of those severely disabled by mental disorder
- With displaced populations, plan for return home
- Collaborate with existing health services and authorities to facilitate sustainable care

severe disorders in established international guidelines for mental health and psychosocial support in emergencies.<sup>18</sup>

Addressing global mental health needs requires the appropriate training and supervision of health workers to integrate mental health into primary health care.<sup>26</sup> The advantages of increased access, reduced stigma, and increased respect for human rights, a holistic approach to physical and mental health, cost effectiveness, and good outcomes are very important in humanitarian settings where referrals to secondary or tertiary services of any kind—especially in the early stages of the emergency—are unlikely to be possible, and a new skill set must be rapidly acquired.<sup>9–12,27</sup>

Mental health capacity building in primary health care often fails because of training the wrong people. The key task is the identification of a clinical member of the primary health-care team who has the capacity, interest, and time to use the training in the long term. Understanding the pre-existing primary health-care services is essential for integration.<sup>28</sup> Thus, in Sierra Leone primary health-care services in remote post-conflict areas are commonly delivered by single-handed community health officers with 3 years of training. One such officer was trained to run a primary health-care referral service, visiting different sites on different days, and to accept referrals from his colleagues.<sup>29</sup> In Aceh, after the tsunami the Indonesian Government's decision to create dedicated community mental health nurses attached to primary health-care teams provided the obvious trainees.<sup>27</sup> In

Ethiopia, a trained member of the primary health-care team gives time to mental health cases every week, while referring complex cases to a hospital-based specialist. In humanitarian settings, overburdening the most skilled staff members with multiple trainings that cannot be integrated into their normal work and that they do not have time to use should be avoided.

In our experience, 12 days of theoretical training, spread over 3 months to allow for the application of new knowledge, combined with half a day per week of on-the-job supervised training, including home visits over 6 months, is the minimum time necessary to allow a primary health-care clinician to obtain the knowledge to identify and provide front-line management of the most commonly presenting conditions (panel 3). In keeping with the experiences of others,<sup>11,12</sup> the authors have found that incremental theoretical training, combined with field-based on-the-job supervision, is more satisfactory than consolidation of all theoretical training into one 2-week period, or providing on-the-job sessions in an outpatient psychiatric clinic in an urban setting. Such options might seem cheap to donors and easy to administer, but are likely to leave the unsupervised trainee unable to cope with cases presenting in emergencies. A primary health-care clinic is more accessible and less stigmatising than a psychiatric outpatient clinic, but this means that patients may present with problems that can be easily missed without careful questioning (panel 4).

Key components of a relevant training curriculum are outlined in panel 3. The biopsychosocial approach should be adapted to the existing culture, skills, and interests of the trainees.

### Panel 3: Basic knowledge for primary health-care workers to address mental health problems in emergency settings

- Communication skills
- Basic problem-solving skills
- Psychological first aid
- Recognition and front-line management of mild, moderate, and severe neuropsychiatric disorders in adults and children including:
  - a. Acute and chronic psychoses
  - b. Epilepsy
  - c. Alcohol and substance misuse
  - d. Mental retardation
  - e. Severe emotional disorders
  - f. Common mental disorders
- Simple cognitive-behavioural techniques
- Interpersonal psychotherapy group or individual approaches
- Proper use of essential psychotropic medication
- Appropriate lines of referral to social supports in the community and, if accessible, to secondary and tertiary services
- Time-management skills including service reorganisation

**Panel 4: Somali border, Ethiopia, 2008**

Noura is a 20-year-old Somali refugee living in a refugee camp in Ethiopia, who had symptoms of depression since her arrival a year ago. She was brought to the primary health-care service by her relatives because of suicidal ideas and an attempt to set herself on fire. On occasions, she would wander away from the camp and had to be brought back as she was disoriented. She cried profusely during the first four interview sessions, but gave little information about herself. As the interviews were not yielding much, a new approach was taken in the fifth interview and the supervising psychiatrist spoke gently but directly to her: "Noura, you have the signs and symptoms of someone who has been raped, is that true?". She sat bolt upright and said she had not informed anyone about the rape as she feared being an outcast. In refugee camps, if a woman is raped, it is her own fault and she risks her family throwing her out. The direct question by the psychiatrist would have been neither appropriate nor possible if a trusting relationship had not been formed in the previous four interviews. Once the topic of rape was opened up, it made it possible for her to speak about being gang-raped in Mogadishu by soldiers who had attacked their home. Ever since, she had nightmares and intrusive thoughts, poor appetite, sleeplessness, and suicidal thinking; she also disclosed, for the first time, a vaginal discharge she had had for 4 years. A diagnosis of major depression and post-traumatic stress disorder was made, and she was treated with interpersonal therapy and amitriptyline. Pelvic inflammatory disease was diagnosed and treated with antibiotics. After 4 months of treatment, she had completely recovered and remains in the camp leading a normal life.

In humanitarian settings, trainer, trainee, and beneficiary might come from different cultures. For example, in Chad, Palestinian doctors were training French-speaking Chadian general physicians and nurses to treat Zaghawa-speaking Darfur refugees. Historical and social circumstances could have an important role in relationships between trainers, trainees, and patients. For example, Acehnese staff and patients were initially happier to be trained and treated by British or Malaysian psychiatrists than by countrymen from south Indonesia who, reportedly, were perceived to be associated with previous martial law. Political and cultural literacy is essential, as is openness to cultural differences and complexity, including those created by age, sex, and social class.

Most primary health-care workers identify lack of time as the greatest obstacle to dealing appropriately with people with mental disorders; thus, time-management training is essential. Drawing parallels with antenatal care—which primary health-care workers often see as a natural part of their remit—works well. One model is for the primary health-care team to provide a dedicated weekly mental health clinic run on an appointment basis to which any patient with mental health problems can be directed once identified, so that they can be given the necessary time. This clinical time needs to be combined with the training of volunteers and family members to provide psychosocial support that is the other essential part of treatment, allowing for maintenance on medication, accompaniment, and reintegration into society. Volunteers are key to assist in the care of individuals without family support.

The other major obstacle to primary health care is the lack of sustainable supplies of appropriate psychotropic medication. Many countries forbid the prescription of such medications by non-physicians and some countries forbid prescription by non-specialists.<sup>30</sup> Established international guidelines<sup>8</sup> recommend that all primary health-care teams should be equipped with, and trained in, the use of one generic antipsychotic, one anticonvulsant, one antidepressant, and one anxiolytic drug (for use with severe substance abuse and convulsions), all in tablet form. The 2006 Interagency Emergency Health Kit<sup>31</sup> only includes an antipsychotic and anxiolytic drug in injectable form, and this is in the process of being changed. Typical antipsychotics, which are equally therapeutic and more cost effective than the newer atypical ones,<sup>32</sup> are on the essential drug lists of most countries, as is amitriptyline. Newer treatments for depression are still not on essential drug lists, although fluoxetine has recently been added to the WHO model essential medicines list. Generic medicines are recommended because they are as effective as branded drugs but cheaper, and thus increase programme sustainability.

One of the reasons for the neglect of people with severe mental disorders in humanitarian settings is that in most countries, before the emergency, most families used traditional healing systems, perceiving the problem as being caused by evil spirits, witchcraft, or ghosts.<sup>11,12</sup> More than half of 20 literate, educated Somali mental health volunteers shared this perspective in recent training. In Nepal, 7% of the adult Bhutanese refugee population reports working as a traditional healer.<sup>33</sup> In the IMC series in Aceh,<sup>27</sup> Pakistan, and Sierra Leone most patients with pre-existing mental disorders had seen a traditional healer before accessing modern care (64%, 52%, and 88%, respectively). Families try to access hospital care only when traditional treatments fail. In many cases of continued conflict, modern care has been unavailable for many years. Once the population is struck by disaster, traditional methods are also likely to become less available. For example, many refugee traditional healers in Chad had no means to work, having left herbal supplies and prayer boards at home. In Aceh, the small hospital run by a healer on the west coast was destroyed by the tsunami. Most traditional healers are interested in setting up a collaboration. They can provide information about who in the population is sick and understanding of local models of causation and cure. Building a respectful relationship through, for example, cross referrals and joint clinics gives opportunities to identify and make suggestions for correcting inappropriate practices, training in basic nursing skills including hygiene, and discussing the use and misuse of physical restraint. Traditional healers might also be included in treatment plans with the family (panel 5), provide morally effective guidance regarding the misuse of alcohol or drugs, and help with administering and monitoring long-term antipsychotic medication.

## Continuing problems

Persistent conflict, insecurity, and lack of physical access can on occasion make it difficult to initiate services or cause their suspension in the midst of a programme (panel 6). Health-care workers and facilities might, on occasion, be targeted, and patients might be unable to access care or understand the risks.

The increasingly participatory and rights-based focus of many psychosocial programmes and the fact that a high proportion of those accessing services are likely to have suffered human-rights abuses could mean that local authorities in conflict areas view agencies providing mental health services with suspicion and deny or suspend access.<sup>34</sup> Contingency plans are needed to ensure the continued provision of medication and training. Service providers need to distinguish between advocacy and clinical roles.<sup>9</sup>

Conflicts and disasters involving mass displacement often occur in remote or border areas far from existing mental health services, which tend to be city and hospital based. However, reluctance sometimes exists on the part of service providers to support any decentralisation of services that might dilute funding at the centre.<sup>23</sup> Also, in low-income and middle-income countries mental health is likely to be a problem of low priority; governments often do not have the political will or budget to make necessary changes.<sup>23</sup> For example, in Aceh, Indonesia, at the start of 2005, funds for inpatient services were scarce, but neither central nor provincial authorities had allocated any resources to community mental health services.

The problems are compounded by a global lack of human resources. Most mental health services are already understaffed and high-income country medical career and work structures are not geared to support mental health services in humanitarian settings. The 2-week in-and-out model of short missions by high-income-country specialists—possible for surgical interventions—cannot be applied in the area of mental health, for which most of the work by expatriates is on-the-job training of local staff. Such training is labour and time intensive, and the skills for working in emergency contexts include general adult and child psychiatry, substance misuse, neuropsychiatry, public health, and anthropology. As yet, no established postgraduate training programmes for psychiatrists exist. Current practitioners have learnt on the job. Existing programmes in international mental health often emphasise research over service design and delivery, and might draw people away from emergency settings to universities in capital cities.

Non-governmental agencies wanting to address these problems face difficulties. The donor community and media remain mainly interested in the effects of psychological trauma. Although some donors are committed to work within the framework of the Inter-Agency Standing Committee guidelines, many are unaware of the problems of people with severe mental disorders in these settings, thus funding is harder to

### Panel 5: Sierra Leone, 2004

John is a 20-year-old boy who worked in his family farm. He suddenly became violent and was taken to the herbalist. The psychiatrist was invited to see him by the local traditional healer and found him chained to a log under a small shelter, covered with dirty cuts sitting upright in a rigid uncomfortable posture: mumbling, unresponsive to questions, and spitting copious saliva from his mouth. According to his brother, the problem began 2 years before when John became disoriented and unable to find his way home from the bush. Since then, he had had numerous episodes when he would go rigid, salivate, and run off into the bush. If anyone attempted to interfere, he would fight them. The attacks could last days; he was not unconscious but had no memory of them when they ended. In between episodes, he was completely normal. The herbalist's analysis was that John's failure to pay for a good-luck charm obtained while a refugee in Guinea had led to the vendor bewitching him. He was being treated with washes and inhalations from a pot of boiling water and herbs placed between his legs. On the third day of treatment, although John's mental state was unchanged, there was a third-degree burn on his thigh and penis from contact with the hot pot. The herbalist, distressed that this had occurred, allowed him to be moved to the field hospital to treat the burn. A clinical diagnosis of complex partial seizures was made and he was immediately started on carbamazepine. Within 24 h, John's mental state was completely normal, although he had no memory of what had happened at the herbalist. He received a skin graft and continued on anticonvulsant medication. The herbalist visited the patient in hospital with the psychiatrist, and took a great interest in the diagnosis and treatment of epilepsy, agreeing that medication had resulted in improvement.

### Panel 6: Gaza, 2009

When the recent war in Gaza broke out, a mother called to inform the psychiatrist that her son Samir, a high-school student and patient on maintenance therapy and family therapy for bipolar disorder, had become withdrawn, afraid, and was refusing to eat. The psychiatrist could not make home visits as Israeli tanks blocked the road to Samir's house, and follow-up on the phone was difficult as the lines functioned poorly. In one phone consultation, the psychiatrist advised the mother to recommence the same treatment as in previous acute episodes, meaning haloperidol. However, because of the unclear phone connection, the mother misunderstood and gave Samir antidepressants with the result that he rapidly became manic. This situation became very dangerous as Samir started to go outside during fighting and air raids, and to talk to militia men on the streets. He bought a firearm and military attire. He declined advice from the psychiatrist, and the family was unable to bring him home.

The psychiatrist initiated contacts with the local authorities and informed them of his condition and the danger to himself and others. The police managed to bring him back to his house and he was locked in his room. A counsellor managed to convince him to restart haloperidol in return for more freedom, and communication with him became easier. The psychiatrist convinced him over the phone to take the medication and promised to meet with him as soon as conditions allowed. When the meeting occurred, Samir was both angry and grateful that action had been taken to stop him from hurting himself and others. He was reminded of an agreement that the psychiatrist should take such an action whenever he perceived a clear danger. Family therapy was resumed and Samir has returned to his studies.

obtain. On occasion, donors have proscribed the use of emergency funds to treat those with pre-existing mental health problems, which is in contradiction to established international standards<sup>35</sup> and guidelines.<sup>8</sup> Most psychosocial non-governmental organisations provide various essential community services that do much for the social and emotional needs of the population. However, removing

clinical contact from the psychosocial domain can leave those with severe mental disorders underserved.<sup>36,37</sup> Indeed, non-governmental organisations rarely engage in active case finding of those with severe mental disorders. The new international cluster system to coordinate the humanitarian response in emergencies does not formally acknowledge that mental health and psychosocial support involve connected and cross-cutting intersectoral issues with implications for health, protection, shelter, water, and food, as the case histories included (panels 1, and 4–6) illustrate.

Furthermore, although evidence for mental health interventions in stable low-resource settings is growing, it is still lacking in humanitarian settings.<sup>37</sup> Culturally valid epidemiological research is a difficult undertaking in this context, and the ethics and appropriate methods are debated.<sup>38–42</sup>

### Crisis as an opportunity

Services created by non-governmental organisations in these contexts are a drop in the ocean compared with what is needed. In all areas mentioned, most people with severe mental disorders remain unrecognised, untreated, and unable to access services. Physical restraint is common because, in the absence of care, families see it as the most humane solution.<sup>43</sup> Non-governmental agencies cannot be a substitute for effective government strategy and action. But they might sometimes be a stimulus. Paradoxically, in a world with 24-h globalised media and short-attention spans, crises such as wars and disasters might be opportunities for development when governments and international actors suddenly become aware of needs that have been neglected for decades. Thus, emergency mental health services developed by International Medical Corps and other national and international agencies in post-tsunami Aceh became a model for community-based mental health services in Indonesia.<sup>27,44</sup> Similarly, agencies working in post-tsunami Sri Lanka substantially contributed to the development and continuous implementation of a national mental health strategy in the country.<sup>45,46</sup> In Kosovo, emergency mental health services during the war evolved into a public child psychiatry service.<sup>47</sup> The training of Jordanian general practitioners to provide mental health services for Iraqi refugees has improved the mental health service at community level in selected areas in Jordan. Even with minimal resources, the simple creation of an accessible service and treatment of sufferers with dignity challenge ostracism and stigmatising beliefs.

#### Contributors

LJ participated in the design, set up, and monitoring and evaluation of all emergency services described, and led the writing of the report. JBA participated in the design, set up, and monitoring and evaluation of three emergency services (Sierra Leone, Aceh, and Pakistan), and contributed to the writing of the report. MEM, AM, and HS participated in the design, set up, and monitoring and evaluation of one emergency service (Chad, Aceh, and Ethiopia, respectively), and contributed to the writing of the report. MvO participated in the development of normative guidance and contributed to the writing of the report.

#### Conflicts of interest

We declare that we have no conflicts of interest.

#### Acknowledgments

This report is based partly on a presentation at the Academy of Medical Sciences global mental health symposium in London on Sept 4, 2008. We thank all the International Medical Corps staff members in Aceh, Pakistan, Sierra Leone, Chad, and Ethiopia who have contributed to running mental health services in those locations and assisted in collecting data; and Prof Allen Dyer and unknown reviewers for their comments on earlier drafts of this report. The views expressed in this article are solely those of the authors and do not necessarily represent the views, policies, and decisions of the authors' employers. Funding for the programmes described in the report was provided by Bureau for Population, Refugees and Migration, US Department of State, USA; Office for Disaster Assistance, US Department of State, USA; and Department of International Development, UK. The figure was kindly provided by Dr Lynne Jones. This report is dedicated to the memory of Hassen Sherief (1960–2009).

#### References

- Jones L, Asare J, Elmasri M, Mohanraj A. Mental health in disaster settings. *BMJ* 2007; **335**: 679–80.
- OCHA orientation handbook on complex emergencies. Office for the Coordination of Humanitarian Affairs. 1999. [http://www.reliefweb.int/library/documents/ocha\\_orientation\\_handbook\\_on\\_.htm](http://www.reliefweb.int/library/documents/ocha_orientation_handbook_on_.htm) (accessed July 28, 2009).
- Summerfield D. A critique of seven assumptions behind psychological trauma programmes in war-affected areas. *Soc Sci Med* 1999; **48**: 1449–62.
- Silove D, Ekblad S, Mollica R. The rights of the severely mentally ill in postconflict societies. *Lancet* 2000; **355**: 1548–49.
- Toole M. Improving psychosocial survival in complex emergencies. *Lancet* 2002; **360**: 869.
- Weiss M, Saraceno B, Saxena S, van Ommeren M. Mental health in the aftermath of disasters: consensus and controversy. *J Nerv Ment Dis* 2003; **191**: 611–15.
- Van Ommeren M, Saxena S, Saraceno B. Mental and social health during and after acute emergencies: emerging consensus? *Bull World Health Organ* 2005; **83**: 71–76.
- Inter-Agency Standing Committee (IASC). IASC guidelines on mental health and psychosocial support in emergency settings. 2007. <http://www.humanitarianinfo.org/iasc/pageloader.aspx?page=content-product-default> (accessed July 28, 2009).
- De Jong K, Ford N, Kleber R. Mental health care for refugees from Kosovo: the experience of Médecins Sans Frontières. *Lancet* 1999; **353**: 1616–17.
- Van de Put W, Eisenbruch M. The Cambodian experience. In: De Jong J, ed. Trauma, war, and violence: public mental health in socio-cultural context. New York: Kluwer, 2002: 93–155.
- Tenant C, Silove D. The development of a mental health service in East Timor: an Australian mental health relief project. *Bull Board Int Affairs Royal College Psychiatrists* 2005; **8**: 17–19.
- Ventevogel P, Azimi S, Jalal S, Kortmann F. Mental health care reform in Afghanistan. *J Ayub Med Coll Abbottabad* 2002; **14**: 1–3.
- Yule W. Theory, training and timing: psychosocial interventions in complex emergencies. *Int Rev Psychiatry* 2006; **18**: 1–6.
- Carballo M, Heal B, Horbaty G. Impact of the tsunami on psychosocial health and well-being. *Int Rev Psychiatry* 2006; **18**: 217–23.
- Kessler R, Galea S, Jones R, Parker A, on behalf of the Hurricane Katrina Community Advisory Group. Mental illness and suicidality after hurricane Katrina. *Bull World Health Organ* 2006; **84**: 930–39.
- Karam EG, Mneimneh ZN, Karam AN, et al. Prevalence and treatment of mental disorders in Lebanon: a national epidemiological survey. *Lancet* 2006; **367**: 1000–06.
- Silove D, Bateman R, Brooks T, et al. Estimating clinically relevant mental disorders in a rural and an urban setting in postconflict Timor Leste. *Arch Gen Psychiatry* 2008; **65**: 1205–12.
- Sartorius N, Kaelber CT, Cooper JE, et al. Progress toward achieving a common language in psychiatry - results from the field trial of the clinical guidelines accompanying the WHO classification of mental and behavioral-disorders in ICD-10. *Arch Gen Psychiatry* 1993; **50**: 115–24.

- 19 Kendell R, Jablensky A. Distinguishing between the validity and utility of psychiatric diagnoses. *Am J Psychiatry* 2003; **160**: 4–12.
- 20 Summerfield D. How scientifically valid is the knowledge base of global mental health? *BMJ* 2008; **336**: 992–94.
- 21 Kleinman AM. Rethinking psychiatry. New York: FreePress/Collier Macmillan, 1988.
- 22 Patel V, Abas M, Broadhead J, Todd C, Reeler A. Depression in developing countries: lessons from Zimbabwe. *BMJ* 2001; **322**: 482–84.
- 23 Saraceno B, van Ommeren M, Batniji R, 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.
- 24 Van Ommeren M, Saxena S, Loretta A, Saraceno B. Ensuring care for patients in custodial psychiatric hospitals in emergencies. *Lancet* 2003; **362**: 574.
- 25 Jones L. Letter from Sarajevo: on a front line. *BMJ* 1995; **310**: 1052–54.
- 26 WHO. Integrating mental health in primary health care: a global perspective. Geneva: World Health Organization, 2008.
- 27 Jones L, Ghani H, Mohanraj A, et al. Crisis into opportunity: setting up community mental health services in post-Tsunami Aceh. *Asia-Pacific J Public Health* 2007; **19**: 60–68.
- 28 Hodges B, Inch C, Silver I. Improving the psychiatric knowledge, skills, and attitudes of primary care physicians, 1950–2000: a review. *Am J Psychiatry* 2001; **158**: 1579–86.
- 29 Asare J, Jones L. Tackling mental health in Sierra Leone. *BMJ* 2005; **331**: 720.
- 30 WHO. Mental health systems in low and middle income countries: a cross national analysis of 42 countries using WHO-AIMS data. Geneva: World Health Organization, in press.
- 31 WHO. The interagency emergency health kit: medicines and medical devices for 10,000 people for approximately 3 months. Geneva: World Health Organization, 2006.
- 32 WHO. Economic aspects of the mental health system: key messages to health planners and policy makers. Geneva: World Health Organization, 2006. [http://www.who.int/mental\\_health/economic\\_aspects\\_of\\_mental\\_health.pdf](http://www.who.int/mental_health/economic_aspects_of_mental_health.pdf) (accessed July 28, 2009).
- 33 Van Ommeren M, Komproe I, Cardena E, et al. Mental illness among Bhutanese shamans in Nepal. *J Nerv Ment Dis* 2004; **192**: 313–17.
- 34 Boyden J. Anthropology under fire: ethics, researchers and children in war. In: Boyden J, de Berry J, eds. Children and youth on the front line. New York: Berghahn, 2004: 237–58.
- 35 Sphere Handbook. Humanitarian charter and minimum standards in disaster response. Geneva: Sphere Project, 2004.
- 36 Scholte W, van de Put W, de Jong J. A protocol for psychosocial intervention in refugee crisis; early experiences in Rwandan refugee camps. *Intervention* 2004; **2**: 181–92.
- 37 Van Ommeren M, Saxena S, Saraceno B. Mental and social health during and after acute emergencies: emerging consensus? *Bull World Health Organ* 2005; **83**: 71–75.
- 38 Patel V, Aroya R, Chatterjee S, et al. Global Mental Health 3: Treatment and prevention of mental disorders in low-income and middle-income countries. *Lancet* 2007; **370**: 991–1005.
- 39 Leaning J. Ethics of research in refugee populations. *Lancet* 2001; **357**: 1432–33.
- 40 Sumathipala A, Siribaddana S. Research and clinical ethics after the tsunami: Sri Lanka. *Lancet* 2005; **366**: 1418–20.
- 41 Allden K, Jones L, Weissbecker I, et al. Mental health and psychosocial support in crisis and conflict: report of the Mental Health Working Group, Humanitarian Action Summit 2009. *Prehosp Disaster Med* 2009; **24**: 217–27.
- 42 Bolton P. Cross-cultural validity and reliability testing of a standard psychiatric assessment instrument without a gold standard. *J Nerv Mental Dis* 2001; **189**: 238.
- 43 Minas H, Diatri H. Pasung: physical restraint and confinement of the mentally ill in the community. *Int J Mental Health Syst* 2008; **2**: 8.
- 44 Prasetyawan, Viora E, Maramis A, Keliat BA. Mental health model of care programmes after the tsunami in Aceh, Indonesia. *Int Rev Psychiatry* 2006; **18**: 559–62.
- 45 Mahoney J, Chandra V, Gambheera H, De Silva T, Suveendran T. Responding to the mental health and psychosocial needs of the people of Sri Lanka in disasters. *Int Rev Psychiatry* 2006; **18**: 593–97.
- 46 Budosan B, Jones L, Wickramasinghe WAL, et al. After the wave: a pilot project to develop mental health services in Ampara district, Sri Lanka post-tsunami. *J Human Assist* 2007; <http://jha.ac/2007/09/16/after-the-wave-a-pilot-project-to-develop-mental-health-services-in-ampara-district-sri-lanka-post-tsunami/> (accessed July 28, 2009).
- 47 Jones L, Rrustemi A, Shahini M, Uka A. Mental health services for war affected children: report of a survey in Kosovo. *Br J Psychiatry* 2003; **183**: 540–46.