Understanding community psychosocial needs after disasters: Implications for mental health services

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ABSTRACT

The psychosocial impact of disasters has attracted increasing attention. There is little consensus, however, about what priorities should be pursued in relation to mental health interventions, with most controversy surrounding the relevance of traumatic stress to mental health. The present overview suggests that acute traumatic stress may be a normative response to life threat which tends to subside once conditions of safety are established. At the same time, there is a residual minority of survivors who will continue to experience chronic posttraumatic stress disorder (PTSD) and their needs can be easily overlooked. The ADAPT model offers an expanded perspective on the psychosocial systems undermined by disasters, encompassing threats to safety and security; interpersonal bonds; systems of justice; roles and identities; and institutions that promote meaning and coherence. Social reconstruction programs that are effective in repairing these systems maximize the capacity of communities and individuals to recover spontaneously from various forms of stress. Within that broad recovery context, clinical mental health services can focus specifically on those psychologically disturbed persons who are at greatest survival risk. Only a minority of persons with acute traumatic stress fall into that category, the remainder comprising those with severe behavioural disturbances arising from psychosis, organic brain disorders, severe mood disorders and epilepsy. Establishing mental health services that are community-based, family-focused and culturally sensitive in the post-emergency phase can create a model that helps shape future mental health policy for countries recovering from disaster.

KEY WORDS: Disaster, mental health, trauma, posttraumatic stress disorder

Disaster mental health has emerged as a major field in psychiatry, an important development at a time when large numbers of persons have had their lives severely disrupted by natural and human-made catastrophes.[1-4] The impact of disasters differs according to the type, suddenness and scale of the catastrophe and the social, historical and cultural context in which they occur.[5-7] At the same time, disasters have some key elements in common, particularly the threat they pose to survival and adaptation. Likewise, in spite of cultural differences, individuals and communities manifest some universal patterns of psychosocial responses.[8-10] In planning mental health initiatives after disasters, it is important to draw on emerging knowledge about these psychological reactions and how they shape the need for appropriate mental health services.[11]

Acute-on-chronic disasters

Some disasters occur in otherwise peaceful and secure environments but commonly, the affected society (or at least some sectors of it), are already vulnerable.[12] Almost all large-scale disasters are characterized by high levels of immediate chaos, widespread human distress, and a delay before formal health and social services can respond adequately to all the evident human needs.

Nevertheless, in contexts that are already deficient in services or where basic human needs and rights have been neglected, the institutional response tends to be less effective.[13] In particular, there is often a complex interaction between the acute disaster, ongoing political conflict and underdevelopment, the result being that mental health services are limited in capacity, or exclusionary (for example, for political reasons, certain groups of persons may be denied assistance).[14,15] Hence, in such settings, the capacity of services to respond to an acute disaster may be very constrained.[16] Some of the key areas affected by the tsunami can be characterized as such acute-on-chronic disaster sites.[13] A key constraint in planning a mental health response in such settings therefore is that there are rarely enough resources or skills to provide specialist mental health interventions for more than a small minority of the affected population.[17]

The dilemma of the contemporary trauma model

Limitations in service capacity make it imperative to consider carefully who needs priority intervention, a challenge that has been made more complex by the ongoing controversy about

psychological trauma and its consequences.[5,16] Since the introduction of the diagnosis of posttraumatic stress disorder (PTSD) in the third edition of the Diagnostic and Statistical Manual of the American Psychiatric Association in 1980,[18] this category has dominated research and clinical developments in the disaster field.[19-22] The current diagnostic system, DSM-IV T-R, defines a psychological trauma as an event that threatens the life or integrity of affected persons or those close to them in a manner that evokes horror, fear or helplessness. Clearly, large sectors of the population will experience one or more events meeting this definition in settings of war, mass conflict, or overwhelming natural disasters such as the tsunami that struck South Asia.[13]

According to the DSM IV, PTSD is a condition that includes 3 symptom constellations: intrusive imagery and memories of the trauma (flashbacks, nightmares, periods of dissociation in which the person feels and acts as if the trauma was recurring); avoidance and numbing, including phobias of places or events that trigger trauma memories, social withdrawal, and a general dampening of emotions; and hyperarousal or overactivity of the autonomic nervous system, including symptoms such as poor concentration and memory for new events, startle reactions, sweating, palpitations, irritability, and insomnia.

In studies in Western countries, PTSD occurs in between 10 to 20% of those exposed to common traumas such as motor vehicle and other accidents, assault and natural disasters.[23,24] PTSD therefore is one of the most common psychiatric disorders in societies such as the US, accounting for a substantial level of psychosocial disability.[25] Contemporary treatment guidelines for PTSD indicate the need for a range of psychological interventions, including cognitive behavioural treatments[26,27] and/or psychiatric medications (tricyclic antidepressants or the newer specific serotonin reuptake inhibitors).[28] These interventions require specialist professional skills to administer and appropriate medications are not always available or affordable in low-income developing countries, nor is there always the necessary expertise to prescribe and monitor their use.

It is also important to recognize that PTSD is only one of several psychological reactions to trauma and disaster, with exposed populations being at risk of a range of other stress-related problems such as complicated grief, depression, other anxiety disorders, somatoform disorders and drug and alcohol abuse.[9,24,29,30] There is also a subgroup with established severe mental illnesses such as psychosis, mood disorders and neuropsychiatric conditions who need urgent care.[11,15] Devising emergency mental health programs to meet all these needs presents a daunting challenge, particularly as there has been little consensus in the field about the scope, priorities and mode of delivery of emergency programs.[16,31] Ideally, a combination of interventions should be provided to span general community psychosocial issues, the needs of the traumatized and those with other severe mental illnesses such as psychosis, but there is often conflicting views and competition between humanitarian agencies about where the priorities should lie, particularly in settings of limited resources.[32] As indicated, a key area of disagreement is the emphasis that should be given to traumatic stress, particularly those suffering from PTSD, an issue that is worthy of further consideration.[16]

Conceptualizing the human response to disaster

A consideration of the genesis of traumatic stress reactions may offer some clues to the extent, nature and timing of the mental health interventions that are required.[10,33] It seems likely that the acute psychological reaction to disaster reflects an evolutionarily-determined response designed to maximize survival of both the individual and the collective.[34] The fear response mobilizes physiological and behavioural reactions that protect the individual from death or injury. In the evolutionary history of the human species, it makes sense that rehearsing memories of novel trauma experiences may have been adaptive by ensuring effective learning of environmental cues that might signal the return of that threat (or similar dangers) in the future. Avoidance and arousal responses reflect primitive flight and fight mechanisms that promote survival.[34] The persistence or resolution of this constellation of acute responses is determined by many factors including heredity, past exposure to trauma, psychiatric history, gender, and cultural and social context. With an eye on potential humanitarian interventions, however, it is valuable to focus on the ecosocial conditions in the posttraumatic environment that determine whether traumatic stress responses persist and become dysfunctional, or, alternatively, are resolved.[6,35,36]

Emerging epidemiological evidence suggests that populations exposed to warfare and displacement tend to show a gradual reduction in traumatic stress reactions over time, but importantly, this may depend on whether or not survivors reside in recovery environments that are consistently and predictably safe and secure.[37-40] If survivor communities continue to confront conditions of danger and threat, as is the case amongst traumatized asylum seekers who are at risk of repatriation to settings of danger, then their PTSD reactions tend to persist.[6,35,36]

These findings are consistent with emerging laboratory evidence suggesting that there is a fine balance in the brain between excitatory and inhibitory mechanisms that modulate the learned fear response.[34,41,43] The intensity of this response is dynamic, moderated by cortical pathways that help the survivor to interpret ongoing risk.[34,42] Where survivors are faced by ongoing or future threat, the primitive traumatic stress reaction remains in an active state, increasing the likelihood that it will become chronic and potentially disabling.[36] Hence, the posttraumatic stress reaction may only lead to disability when it is persistent[27,34] which is more likely if the environment remains threatening. From a humanitarian perspective, the key issue therefore is to create conditions of safety and security in order to ensure that the maximal number of survivors recover spontaneously from acute traumatic stress reactions, minimiz-

ing the need for formal psychological interventions.

The ADAPT Model (Adaptation and Development after Persecution and Trauma)

Posttraumatic stress disorder is not the only stress response observed in survivors of mass disasters. As indicated, populations are vulnerable to a range of problems, including complicated grief, depression, somatoform disorders, and drug and alcohol abuse. These outcomes have a complex relationship to a range of challenges faced by disaster-affected societies. The ADAPT (Adaptation and Development After Persecution and Trauma) model proposes that the key psychosocial domains that are threatened by disasters include: security and safety; interpersonal bonds and networks (the family, kinship groups, community, society); justice and protection from abuse; identities and roles (parent, worker, student, citizen, social leader, etc); and institutions that confer existential meaning and coherence: traditions, religion, spiritual practices, political and social participation.[9]

Repairing these damaged systems and the institutions that support them forms the basis for building a framework of recovery for both individual survivors and their collectives. Successful humanitarian programs achieve this by creating durable conditions of safety and security; reuniting families, kinship groups and communities; establishing effective systems of justice; creating the foundations for work, and the re-establishment of livelihoods, the pursuit of education, training and other opportunities, and the establishment of national and other identities; and re-creating institutions that facilitate the practice of religion, cultural traditions and participation in the governance of emerging societies, thereby establishing a sense of social coherence and meaning.[9,11]

None of these recovery processes are easily achieved, however, with several obstacles (social, political, economic) retarding progress in many postconflict settings. The less successful such processes are, the more prevalent will be community-wide distress. In particular, if conditions of danger and insecurity persist, then it is expectable that more members of the survivor community will continue to experience PTSD symptoms.[17] Conversely, where conditions of durable safety are achieved, then the numbers with chronic conditions such as PTSD will be smaller. In that sense, social stability may be the best psychotherapist at the population level.[11]

At the same time, it is inevitable that even in optimal recovery environments, there will be a minority of persons who, because of special vulnerabilities or the overwhelming nature of their trauma, will continue to experience chronic PTSD and other stress-related disorders, and their needs should not be overlooked.

What is the rational mental health response to disasters?

Helping set the framework

The ADAPT framework implies the need for a multi-level approach to psychosocial interventions that consider the individual, the family and the whole community. At the broader level, mental health professionals can provide advice to humanitarian program designers about the importance of the principles outlined in the ADAPT model in ensuring community-wide recovery. In that respect, well-designed reconstruction programs attend simultaneously to psychosocial, economic and cultural recovery.

Support indigenous systems that provide comfort and help

The community itself should be at the forefront in helping its own members since the best comfort comes from people who survivors know and who share their culture, beliefs and values.[44] Strategic assistance from outside, for example, in supporting grieving, memorial and healing rituals, should be carefully designed to avoid intrusion, cultural insensitivity or disempowerment of local leadership systems. One of the greatest errors is to over-rate the ability of outside helpers to understand and shape the recovery process and to under-rate the capacity of affected communities to draw on their own resources to guide and ideally lead these activities. Survivors do not remain passive victims for long and the act of self-help and community action provides the most sustainable route to genuine recovery both for the individual and for the society as a whole.[9,11] Timelines for reconstruction should be set by the community rather than conforming to deadlines driven by the sense of urgency that international aid organizations and donors create in order to "get things done". Raising unrealistic expectations that outside agencies will repair all the damage can itself be undermining, potentially generating a culture of passivity and ultimately, resentment.[45]

Specialist mental health services

As indicated, in many disaster settings, particularly in the developing world, mental health services are inadequate to deal with the crisis. Pre-existing services may have been based on institutional models where patients were held for long periods under deprived conditions in custodial settings without adequate treatment. These facilities may have been destroyed in the disaster and professional staff may have fled. Those with severe mental illnesses therefore are at risk of neglect, exploitation and abuse. In such settings, the post-disaster phase may create opportunities for mental health reform if newly mobilized donor funding is used appropriately.[11]

In the early humanitarian phase, there is a compelling argument to develop an emergency community mental health service, a model that was established in East Timor.[14] Although it is traditional to argue that such services need to be fully integrated into primary community health care centres, this is not always feasible, since in some disaster settings, the primary care service is so disrupted, or overwhelmed with the care of the physically ill, that it is unrealistic to expect personnel also to care for those with severe mental disturbances.

The advantages of developing an emergency community mental health service are several-fold. By being generic in focus, the service can overcome debates about which diagnosis (eg PTSD, psychosis) should be given priority. Instead, the criterion for emergency care should be the urgency of social need, that is, based on whether the person is incapacitated and/or the family and other social systems are unable to contain them

or provide adequate support.[12] This social definition is readily understood by the community, social services and aid agencies.

A wide range of cases are referred including those with psychoses, severe mood disturbances, epilepsy and the minority of those with trauma-related stress reactions including PTSD who are unable to cope with their daily lives. This latter group a small percentage of those identified by community surveys as suffering from PTSD, with the majority of these persons being able to cope in settings where there is adequate social support.[44,46] This approach means that the issue of trauma is not ignored, but that the emphasis in the post-emergency phase is shifted towards caring for those whose traumatic reactions are impeding their (and/or their family's) immediate capacity to survive and adapt, rather than on attempting to resolve all traumatic reactions across the community as a whole.[11]

Once the community and international agencies become familiar with the scope of a newly established emergency mental health service, they generally are accurate in the referrals they make, usually identifying those who are in desperate social situations because of their mental disturbance.[12] Commonly, these are persons who are not eating or otherwise caring for themselves, or who are suicidal or acting in dangerous or bizarre ways because of the severity of their mental disturbances. In settings where traditional healers are available, it is usually the case that they have been consulted prior to the patient being brought to the mental health service as a last resort. As a consequence, the concern that services will be overwhelmed with patients generally is not born out by experience. Even in settings of mass displacement such as refugee camps, approximately one percent of the community seeks care from mental health services each year, a substantial number, but only a fraction of those identified by epidemiological surveys as suffering from PTSD and other stress-related disorders.[46]

An added advantage of establishing emergency mental health services in disaster-affected areas, is that it demonstrates in a concrete way the value of applying a humane model for the care of the mentally ill, an example that can motivate further reform of mental health services as the reconstruction phase gains ground.[11] The community model helps to de-stigmatize mental disorder and to engage the community in a treatment approach in which the family remains the key unit of care – rather than removing the patient to be institutionalized in a distant mental hospital. The emergency mental health service also can become the nidus of training for local community mental health workers so that, as the emergency phase ends and the period of reconstruction and development takes hold, an evolving national mental health system will have key trained personnel available to draw on in order to fill leadership roles.

Conclusions

The present overview suggests that it may be possible to resolve ongoing controversies about the mass impact of psychological trauma in disaster-affected communities. Understanding the early traumatic stress reaction as a normative survival response encourages a more selective approach in identifying those who need immediate professional intervention, particularly in contexts where resources and skills are scarce. The starting point for psychosocial recovery is to ensure that the general emergency relief plan is oriented towards an approach that empowers the community to re-create a cohesive and secure society. Within the broader humanitarian program, there is a vital place for clinical mental health services that focus on the minority of persons whose psychological disturbances place them at survival risk. In the emergency phase, this will include a minority of those with PTSD reactions, the subgroup that is unable to cope largely because of the context in which they find themselves. In the longer term, most persons with early posttraumatic symptoms can be expected to recover if conditions of safety and security are properly re-established. Nevertheless, there will be a minority who develop chronic, disabling traumatic conditions and there is a risk that their needs will be overlooked – they often suffer in silence or present symptoms (such as somatic complaints, poor concentration, sleep difficulties, sexual dysfunction, social avoidance, alcohol abuse, irritability) that may not readily reveal the underlying problem to health professionals. Hence, there is a need to ensure that primary care health personnel receive special training to identify these hidden cases of PTSD and that mental health workers have the skills to provide them with appropriate interventions.

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