

MENTAL HEALTH CARE: AN INTEGRAL PART OF DISASTER MANAGEMENT

Disasters, whether man made or natural, are complex events having the capacity to disrupt normal functioning of a society, change people's lives and challenge the coping abilities of individuals and society [1].

Disaster management is a highly specialized and an evolving field of our times. With the world becoming more vulnerable to conflicts, wars and acts of terrorism, the concomitant happenings of natural calamities further increase the susceptibility of humankind. The new 'disease' called disaster needs to be evaluated, profiled and managed effectively using a comprehensive and an all-encompassing approach in order to make mankind survive.

The disasters are divided into man-made and natural. It is estimated that the world has seen around 11 extreme earthquakes which changed the structure of the earth [2]. The world is hit by 220 natural catastrophes, 70 technological disasters and three armed conflicts every year. On the average there are 2-3 disasters in their emergency phase, 15-20 in their recovery phase and about 12 conflict based emergencies in progress [3]. Although human body is not physiologically designed to handle disasters, the contemporary man has to find ways to face this new challenge.

No nation can be prepared enough for facing such unpredictable forces. Experience with disasters has revealed that whereas destructive force of the calamity is important in determining the trauma it can produce, the vulnerability of the population it afflicts is equally important [3]. Whereas the disasters cannot be predicted, the susceptibility of the people can be improved by devising effective preparedness and planning to combat the aftermath of disasters.

This planning includes pre-emptive appreciation of the nature of disasters and the factors operating in the particular population

in which it occurs. It is however important to guard against a blind following of a plan developed in the West or in response to another calamity elsewhere. Such an approach would not only reflect insensitivity to local needs and cultural variations but would also be an unscientific quick-fix remedy. Yet the experience gained in the management of a disaster in one part of the world can be a useful starting point.

The impact of the natural disasters on a given community is influenced by a variety of factors. These include, the type of natural calamity (earthquake, floods, volcanic eruptions, forest fires), the geographic terrain of the affected area, previous experience of the population with disasters, social factors like community and group cohesion of the population, cultural strengths and traditions of the population, coping strategies adopted by the community, and the resilience factors operating within the community.

Pakistan went through the worst natural disaster of its history on 8th October 2005, when its Northern Areas and Kashmir were hit by an earthquake that measured 7.8 on the Richter scale. In spite of being a resource-poor country, the nation responded to the calamity with a highly organised and effective response. With a heart-warming and swift response from the international community and support of the various agencies of United Nations, the Governmental, non-governmental, private agencies and the Armed Forces responded with unparalleled commitment in the emergency and the post emergency phases.

The knowledge and acceptance of mental health issues as an integral part of the impact of the disaster, and the availability of the mental health services during and well after the relief operations, has been shown to augment the affected populations' natural capacity for survival [4], as well as provide a cutting edge to the general health care and socioeconomic relief operations, in disaster settings. This phenomenon was aptly demonstrated in Pakistan's response to the

disaster, with the Mental Health and Psychosocial Relief plan firmly in position and integrated into general health care and relief activities within two weeks of the start of the relief operations.

Mental Health and Psychosocial Issues in Disaster Settings:

A range of mental health and psychosocial correlates of disasters are known to occur but none has been emphasised more in the Western literature than the early detection and treatment of Posttraumatic Stress Disorder (PTSD), the rates of which have been found to be as high as 30 to 40%. The epidemiological studies in developing countries, show that this may not be the only psychiatric consequence of disasters and may in fact be far less disabling than it is in USA [5], High rates of depression and anxiety, phobias, somatization and dissociation and adjustment issues have been seen instead [6,7]. The PTSD may therefore not be a "category fallacy", yet is surely not the only consequence of a natural trauma. Another group in dire need of acute and urgent as well as long term support is those who suffer from severe psychiatric disorders (2-3%). They may become even more important as the care of a violent or a severely ill patient behaving in a bizarre fashion by a disaster affected, displaced family already in dire straits, may compound the agony and stress. The patients suffering from mood disorders, psychosis, postpartum disorders, disabling anxiety, epilepsy and organic mental disorders may all relapse or destabilise in the wake of a disaster either on account of stress of it or on account of non-provision of maintenance treatment and irregularity in medication or non-compliance.

A large majority of population (up to 90%) may however undergo acute but mostly self limiting stress reactions which usually require provision of safety, reunion with families, reassurance, socioeconomic support and early involvement in relief work, or other productive roles, in an environment of justice, and social order.

The psychosocial issues that are known to result include poverty related issues, increase in drug abuse and smoking, prostitution and beggary, unemployment and a sharp decline in morale, and lack of trust and group cohesion.

In addition to the affected population, the relief workers, the health providers and rescuers are also vulnerable to develop mental health and psychosocial effects requiring awareness, early detection and ongoing support and sometimes formal intervention.

The experience with the Disaster of 8th October has not undergone epidemiological survey, yet the data collected supports the patterns suggested above.

What ever may be the patterns of the clinical disorders resulting from disasters, the psychosocial impact and mental health issues that develop in the backdrop of a disaster require considerable planning and an organised response, both in the short as well as in the long term. Training of relief workers and general health care providers in mental health aspects of disaster can prevent the 'knee-jerk' responses of using benzodiazepines for the affected population or their referral to psychiatrists and psychologists or else stay completely ignorant and oblivious of the mental health issues.

Mental Health Plan:

The need for dealing with a disaster with a mental health relief plan firmly in position and as an integral part of the health relief plan well before a calamity actually hits an area has been highlighted by the Tsunami and natural and man-made disasters hitting USA. The experience of the Earthquake of 8th October in Northern Areas of Pakistan and Kashmir has given added impetus to this approach. This planned approach improves the quality of care for both the carer and the receiver of services, facilitates the relief operations in general, and helps avoid medicalization of stress response of the survivors.

Van Ommeren et al [8] have proposed eight principles that need to be incorporated in a typical mental health plan in response to a disaster:

- a. Contingency planning before the disaster.
- b. Needs assessment before the interventions are put into place.
- c. Use of a long term development perspective.
- d. Collaboration with other relief and health agencies and linking mental health care with socioeconomic support and relief
- e. Provision of mental health treatment and interventions in primary health care settings and as part of the general health care
- f. Accessibility of services for all (including the relief workers and health care providers) irrespective of the degree of affliction by disaster or an injured status
- g. Provision of care only by trained staff and always under strict and ongoing supervision.
- h. Monitoring input, process and output mental health indicators.

The plan must cater for the Emergency phase and the Post Emergency phase of the disaster.

Emergency Phase:

The emergency phase of a disaster usually invites a multitude of national and international agencies, both governmental and non-governmental and a large number of unskilled and partially skilled motivated voluntary workers. This is period when the crude mortality rates are elevated because of disaster induced deprived physical needs (such as food, shelter, physical security, water and sanitation), access to health care and management of communicable diseases.

Some of the earliest and important social interventions needed at this time are the reliable flow of credible information about the disaster, about the efforts being made to establish physical safety of survivors, contact and access details of relief services for the survivors (including what each aid organization is doing and where it is located) and location of relatives. Access to credible information is the basic right of the general public and is essential to reduce public anxiety and distress. The information should be uncomplicated, comprehensive and should show an understanding of the situation of the survivors.

It is important in this stage to combine the mental health care with the provision of social services as both are linked inseparably and enhance the impact of each other.

Other steps needed to be undertaken for the survivors in the Emergency phase include the following in the same order:

Ensuring availability of psychological first aid by trained manpower at all health service delivery points (including patients admitted with injuries locally and those in tertiary care facilities) and in the community. Psychological first aid incorporates use of non intrusive emotional support, addressing basic needs, protection from further harm and organization of social supports and social networks.

Incorporating psychosocial care and rational use of psychotropics in the medical and surgical treatment plans at all tiers along with integration of mental health care at all health care levels. This helps in addressing the stigma of psychiatric illness, facilitation of medical and surgical interventions and helps reduce benzodiazepine abuse. In addition, the psychological and social issues, when addressed alongside systemic/ biological disorders provide high quality of health care to the survivors.

Providing mental health education about the emotional impact of earthquake and treatability of mental disorders and

addressing it in the community level by integrating with the local people of influence and policy makers, helps promote health seeking behaviour. Although there are some authorities who propose that this can 'medicalise' many normal stress reactions but given under supervision of senior mental health experts, it carries more benefits than disadvantages [9].

Mobilization of Community social support for the survivors, re-establishing of cultural and religious events, encouraging active participation in the community are measures that need least of economics and hold big potential for early recovery of the community. Mobilizing community social organizations such as boy scouts, civil services, local political and religious parties as partners in mental health care has been found to be of use for the people of the community in helping them re-develop a sense of purpose and existence.

Early detection, intervention, referral and follow-up of acute trauma related psychosocial consequences and psychiatric disorders in the affected population. Generally the population in the affected areas fall into three categories, namely, psychiatric patients existing in the affected areas before disaster, psychiatric patients whose illness was precipitated by the disaster, people who develop long lasting trauma related psychiatric disorders and lastly the people who are going through the psychological distress and stress reactions of the disaster. The last group is usually in majority in any given trauma situation [10]. The first and second group requires provision of psychotropics because of the destruction/non availability of mental health services and most of them can be managed as outpatients. Few may require short term hospitalization. The third group requires specialized and skilled expertise of mental health professionals and most of these patients need to be evacuated from the affected areas. However, these patients have a tendency to seek help many weeks, months and

sometimes years after the disaster [1]. Their numbers are far less than any of the other categories described above.

Provision of psychosocial support for the relief workers, professionals, paraprofessionals and, volunteers involved in the relief effort to ensure that they are able to maintain their own health. Disasters spare no one. It affects the victims and helpers alike. Disasters as large as earthquakes are fertile grounds for many sequelae including secondary traumatization of relief workers [11]. There are many factors contributing towards it but keeping sensitivity towards this consequence is part of all relief operation worldwide.

Post Emergency Phase:

This phase follows the emergency phase, when crude mortality rate returns to the previous baseline level of the community. The transition from emergency to post emergency phase is not usually smooth and the community may oscillate between the two phases over the next few months before finally landing into the recovery phase.

In this phase the social measures outlined above are continued and in addition if any particular social issue is overriding the rest of the matters it should take priority in health matters as well e.g. poverty is the source of major suffering in the affected areas the health professionals should advocate economic redevelopment initiatives such as credit schemes and income generating activities [12].

During this phase efforts should be organised to develop and incorporate mental health services in general health care settings. Training activities should be organised for primary health care professionals and voluntary workers. This is also the time for development of trauma focused services which should preferably be integrated with general health care and community settings [13].

Empowering and encouraging community based support groups in the

cultural traditions of the community become very helpful during this phase. The focus of these groups should preferably be directed towards problem solving, sharing of solutions and methods of coping, generation of mutual emotional support and sometimes initiating community based activities involving traditional and faith healers and influential figures of the community like Maulvi Sahab, Hakim Sahab and tribal heads [14]. These activities help provide meaning to the lives of survivors.

Post emergency period is also the time where national plans for organization of mental health services are developed for the disaster affected areas focusing on community based services model [15].

Long Term Measures:

The mental health response to the disaster of 8th October in the emergency and the post emergency phases have clearly highlighted a need for a long term strategy to deal with the chronic mental health and psychosocial consequences of the Earthquake. It has also brought into forefront the dire requirement to put into place a formal, system and infrastructure for dealing with all such eventualities in the future may it be a man-made or a natural catastrophe.

The following measures are proposed:

- a. Using the challenge as an opportunity, the earthquake mental health relief plan should be made to merge with the five year and ten year health and development plans of NWFP and Kashmir. This would result in development of a mental health infrastructure hitherto missing from both the affected zones. This must be supported by allocation of funds for mental health services, and a long term commitment of incorporating mental health as an integral part of general health care at all tiers as well as developing tertiary care mental health facilities.
- b. Develop Trauma Focused Services which may initially include setting up of a Psychosocial Trauma Centre. This centre can be developed in collaboration with national, UN and international agencies who participated as reliable partners in the relief operations. The centre may then serve as a training facility for mental health professionals, general health professionals, policy makers and health administrators, community social workers. In addition to provide trained manpower to deal with disasters, it may become hub of research in the field of trauma psychiatry. The centre should ideally be located in a tertiary care mental health facility so that it may be accessible and offer state of the art evidence based interventions for the chronically disabled requiring multimodal and highly skilled diagnostic and treatment facilities.
- c. It is important to realise that how well the survivors will do in the long run, in term of their mental health, depends on their capacity to re-establish social networks, attain a high degree of coherence amongst each other, have a socio-economically viable way of life, work, and also own and participate in the relief and rehabilitation work, and their active participation in it.
- d. All primary, secondary and tertiary care health professionals in the public, private or NGO sectors must attain a fair degree of training, proficiency and an ongoing supervision in early detection and management of long term psychiatric sequelae of disasters, as well as dealing with them in the emergency and the post emergency phases.
- e. The Army Medical Corps needs to take a lead in developing a model comprehensive disaster management

plan with mental health as an integral part of it and then go on to train and rehearse its implementation the same way as it rehearses to improve its preparedness for war.

REFERENCES

1. David Alexander, Interpretation of disasters in terms of changes in culture, **Society and Intl Relations 2005**.
2. Wikipedia, **Free Encyclopedia of Wikimedia Inc 2005**.
3. International Federation of Red Cross Society (IFRCS), **Manual of Disaster Relief Ser for Health Providers 2002**.
4. Alexander DA, Klein S; Epidemiology of PTSD and Patient Vulnerability Factors. **The Med Pub Coy Ltd 2003**.
5. Kessler RC; Posttraumatic stress disorder; the burden to the individual and to the society. **J Clinical Psychiatry 2000; 61(5): 4-12**.
6. De Jong JT, Kompro IH, von Ommeren M. Common mental disorders in post conflict settings. **Lancet 2003; 361: 2128-30**.
7. Ballanger JC, Davidson JR, Lecrubier Y, Nutt DJ, Marshall RD, Nemeroff CD et al. Consensus statement update on posttraumatic stress disorder from the International Consensus Group on Depression and Anxiety. **J Clinical Psychiatry 2004; 65(1): 55-62**.
8. Van Ommeren M, Shekhar Suxana, Bennadetto Saraceno. Mental and social health during and after acute emergencies: emerging consensus?. **Bulletin of WHO 2005; 83(1)**.
9. Organization of Mental Health Services. Geneva:World health Organization; 2003. available from http://www.who.int/mental_health/resources/en/Organization.pdf
10. Freeman C. Drugs and physical treatments after trauma. In: Orner R, Schnyder U, editors. Reconstructing early intervention after trauma. **Oxford University Press 2003; 169-76**.
11. Figley CR, Kleber RJ. Beyond the 'victim': Secondary traumatic stress. In Beyond Trauma. (Kleber RJ, Figley CR, Gersons BPR eds). **Plenum Press New York 1995**.
12. de Jong K, Ford N, Kleber R. Mental health care for refugees from Kosovo: the experience of Medicinis Sans Frontiers. **Lancet 1999; 353: 1616-7**.
13. Weine S, Danieli Y, Silove D, Van Ommeren M, Fairbank JA, Saul J. For the task force on International Trauma Training of the International Society for traumatic stress studies. Guidelines for international training in mental health and psychosocial interventions for trauma exposed populations in clinical and community settings. **Psychiatry 2002; 65: 156-64**.
14. Sheperd JP, Bisson JI. Towards integrated health care: a model for assault victims. **Br J Psychiatry 2004; 184: 3-4**.
15. Humanitarian Charter and minimum standards in disaster response. Geneva: Sphere Project; 2004. available from <http://www.sphereproject.org/handbook/index.htm>

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