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NATURAL DISASTERS IN DEVELOPING COUNTRIES: MENTAL HEALTH ISSUES

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Natural disasters are not only more common in developing countries but also have greater devastating impact. Ninety percent of natural disasters and 95% of disaster-related deaths occur in developing countries.^[1] There are various reasons for this, viz., poor warning systems, inadequate emergency response during disaster, poor preparedness and mitigation measures for the disasters. Besides, disasters in developing countries usually affect a comparatively large number of people. Poor connectivity to affected areas and deficit in resources for acute relief appear as important determinants of morbidity. Pre-disaster factors like lower economic status, poor housing quality and poor communication systems add to the misery.

Cultural differences regarding perception of stress, resilience and coping are well known.^[2] These factors also affect the

prevalence of psychiatric morbidity following disasters. Considering the above-mentioned factors, it is expected that there would be differences in post-disaster mental health outcomes in different cultures. There is a need for increasing awareness of mental health consequences of disasters all over the world, especially in the more vulnerable developing countries. The World Health Organization suggests that it is imperative to carry out extensive research on the population of developing countries that are most affected by natural and man-made disasters.^[3]

The study by Telles *et al.* in this issue of Indian Journal of Medical Sciences adds several insights into the existing evidence on psychological sequelae of a natural disaster in a developing state where typically a large number of people were affected.^[4] Studied within a month of the disaster, it highlighted the acute psychological effects, specifically the risk of post-traumatic stress disorders (PTSD) and depression, which was observed to be more in elderly people. Elderly people have been found to be one of the most vulnerable groups for post-disaster psychiatric morbidity.^[5] There are

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many post-disaster studies in India reflecting psychiatric aspects both in acute and long-term settings. In the early post-disaster phases, significant mental health problems have been reported after the tsunami disaster in the Andamans.^[6] Similarly 3 months after Orissa super-cyclone, 50% of victims were reported to have posttraumatic stress symptoms.^[7] Long-term post-disaster studies in India also report considerable proportions of psychiatric morbidity in the victims, which comprises mainly posttraumatic stress, depression and anxiety disorders.^[8]

Observations of the study by Telles *et al.* re-emphasize that systematic screening of victims in the disaster-affected areas is preferable to routine clinical evaluation, as otherwise, many victims may suffer silently rather than seek psychological help when they struggle even for the basic necessities. Systematic screening can provide critical information for a rational post-disaster public mental health program. Screening should be broad based to include not only trauma-related clinical syndromes but also other disorders; subclinical symptoms; and psycho-social, occupational/ educational and daily life impairments. It is important to develop assessment methods that are age appropriate, culturally sensitive and valid.

There is a great need for strengthening the disaster response system in developing countries. For management of disaster-related mental health issues, organizations should develop phase-appropriate responses and interventions, considering the 5 conceptual phases, namely, (-)1: pre-disaster warning phase; 0: disaster phase, during and immediately after the disaster; 1: early post-

disaster phase; 2: recent post-disaster phase; and 3: remote post-disaster phase.^[5,8] There is also the need for intervention studies in post-disaster scenarios, involving both pharmacological and psychological methods to find out their effectiveness. The influence of phase-appropriate disaster response on the prevalence of psychiatric morbidity in the victims is another area for future studies.

While it is pertinent to conduct post-disaster studies, it should also be highlighted that arranging such studies is difficult considering the ground realities in the immediate aftermath of disasters. However, data-gathering should be an integral part of disaster relief and support work, which will improve the knowledge base for better care of disaster victims.

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