

**Disaster Preparedness: Are We Prepared for Public Health Emergency?**

**Sucharita Maji<sup>1</sup>, Purushottam Giri<sup>2</sup>**

**Affiliation:**<sup>1</sup>Associate Professor, Department of Community Medicine, North Bengal Medical College, Siliguri, West Bengal, India <sup>2</sup>Professor & Head, Department of Community Medicine, IIMSR Medical College, Badnapur, Jalna, Maharashtra, India

**Date of Submission** : 30.10.2019

**Date of online Publication** : 31-12-2019

**Date of Acceptance** : 30.12.2019

**Date of Print Publication** : 31-12-2019

**\*Author for correspondence:** Dr. Purushottam Giri, Professor & Head, Dept. of Community Medicine, IIMSR Medical College, Badnapur, Jalna, Maharashtra, India. E-mail: [drpgiri14@gmail.com](mailto:drpgiri14@gmail.com)

**INTRODUCTION**

Worldwide incidence of disaster has been increasing rapidly in last few years. Global warming and rapid unplanned urbanization are among the important causes of such rise. A natural disaster is an act of nature of such magnitude as to create a catastrophic situation in which the day-to-day patterns of life are suddenly disrupted and people are plunged into helplessness and suffering, and as a result, need food, clothing, shelter, medical and nursing care and other necessities of life, and protection against unfavourable environmental factors and conditions. Many million of populations are suffering from either direct impact or after effect of disaster. Every year natural disasters kill around 90,000 people and affect close to 160 million people worldwide.<sup>[1]</sup>

The statistics are the tip of the ice berg as it reflects the initial impact and the system is also not spared always. The morbidity, mortality and psychological effects affect the generations to some extent. Man made disasters are also almost preventable by formulating long term policies and strict implementation of laws. Some of the natural disasters are also predictable and awareness and preparedness can reduce the loss, at least human lives. Disasters not only take toll of million of human lives but also have detrimental effects on environment and economy. The huge loss of infrastructure, man-hour and imbalance of ecology should be considered while calculating the loss. India is prone to natural disaster. Almost 58.6 percent of the landmass is prone to earthquakes of moderate to very high intensity; over 40 million hectares (12 percent of land) are prone to floods and river erosion; of the 7,516 km long coastline, close to 5,700 km is prone to cyclones and tsunamis; 68 percent of the cultivable area is vulnerable to drought and hilly areas are at risk from landslides and avalanches.<sup>[2]</sup>

**DISASTER PREPAREDNESS**

This is the time to train our manpower to reduce the impact and give medical assistance without losing precious first few hours. To cope with the situation, inter-

sectoral coordination from grass root to top most level of different departments is extremely necessary. All relevant manpower (ministries, local authorities, non-governmental organizations and professional associations, academics and others) should be trained and re-trained and mock drill should be arranged frequently. The Department of Community Medicine of all Medical Colleges has access to serving community. They can take the leadership to train the health manpower as first responder. It may also include blue printing of referral system during emergency and calculation of surge capacity well in advance as part of preparedness. Disaster management requires trained human resources to deal with complex situation effectively to mitigate the impact of disaster on human life and property. Capacity development is an integral process of knowledge and skill building. Capacity may include physical, institutional, social or economic means as well as skilled personal or collective attributes such as leadership and management. It is much more than training and includes human resource development, equipping individual with understanding, skills and access to information, knowledge and training that enables them to perform effectively.<sup>[3]</sup>

Emergency and disaster prevention, mitigation, preparedness and response will depend on the incorporation of appropriate measures in national development planning and in the sectoral plans and programmes of the various ministries. They will also depend on the availability of information on hazards, emergency risks and the counter measures to be taken and on the degree to which government agencies, non-governmental organizations and the general public are able to make use of this information. The complete disaster-management cycle includes the shaping of public policies and plans that either modify the causes of disasters or mitigate their effects on people, property, assets and infrastructure. Institutional capacity should also be increased through

organizational innovation and training. Experience has shown that the result can be a more resilient, less vulnerable population, with fewer disruptions of essential services, such as water and power supplies, improved early warning ability, and better advance planning for evacuations and emergency response. Health managers, as well as front-line community-based professionals and volunteers who deal with environmental health, can contribute to these longer-term efforts.

## **CONCLUSION**

Complete prevention of disasters is feasible only if it is possible to eliminate people's susceptibility to hazards by moving populations away from hazard zones, providing complete protection from hazards, or preventing the physical hazard altogether. This has occasionally been achieved, e.g. the virus responsible for smallpox was eradicated, and cities have been protected from flooding by diverting rivers to alternative courses. However, to survive or improve well-being, humans are prepared to take risks and will even resettle in areas previously affected by natural disasters. The best that can usually be done is therefore to reduce the potential impact of emergencies and disasters. Mitigation actions aimed at reducing (but not eliminating) the impact of future hazard events and reduction of the susceptibility of high-risk groups are then the goals. National Policy on Disaster Management (NPDM) elaborates on national priorities, institutional capacity development, training communities, and professional technical education. Important components of the capacity development are training, education, research and last but not the least awareness generation.



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**Conflict of Interest: None**

**Source of funding support: Nil**

**How to cite this article:** Maji S, Giri P. Disaster Preparedness: Are We Prepared for Public Health Emergency. Nat J Res Community Med 2019;8(4):322-23

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NJRCM: [www.commedjournal.in](http://www.commedjournal.in)