

India requires a public health law for disaster resilience

Sir,

The Indian subcontinent is affected by natural disasters on a regular basis. By and large, civilians remain vulnerable to disasters, and their disaster preparedness is limited due to different contributing factors. Going by estimates >58.6% of the landmass is prone to earthquakes of moderate to high intensity, over 40 million hectares of land carries the risk of flooding and river erosion, 68% of the land that is available for cultivation in India is prone to droughts, and 5700 km of the 7516 km long coastline is prone to tsunamis and cyclones.^[1]

Chemical, biological, and radiological emergencies from time to time add in concert to the vulnerability of the Indian geography. Disasters often lead to disruption of healthcare services, damages infrastructure; severely affects agriculture and crop patterns and also adds to livestock losses at large, besides creating socio-economic problems with fiscal deficits. We chose to focus essentially on how disasters affect health services and why the public health law of disaster resilience (PHLDR) becomes inevitable. In 2015, India was among the top three disaster hit countries, and this had led to economic damages worth \$3.30 billion.^[2]

A disaster affects people of all age groups, but children, women and elderly are affected the most. During this phase, setting up of counseling mechanisms to address psychosocial trauma and shock that victims experience

requires immediate attention and needs to be put in place.^[3]

It is well known that post-disaster situations overwhelm the health systems with acute illness and injury, and often so, the chronic health conditions go unattended. In the bargain, preexisting chronic diseases deteriorate at a much faster rate to acute conditions leading to increased mortality, predominantly among the vulnerable populace.^[4-6]

Food insecurity crops in, water and sanitation mechanisms get infected and affected, reproductive health needs are crippled and overall the problem, magnified. The absence of a PHLDR and absence of a social policy for humanitarian disasters compound the socioeconomic burden it puts on individuals and families.

A legal safeguard was set up in the form of Disaster Management Act 2005 which became an Act of Parliament and thereafter a National Policy on Disaster Management in 2009.^[7] These national frameworks are good to have, but there are visible gaps in the grass-root level implementation. The State Disaster Management Authority (SDMA) and District Disaster Management Authority (DDMA) often so do not have untied funds for mock drills, and in case they do, the District Administration does not want to take risk in using the same.

The Constitution of India defines health as a State subject, having been listed in the Seventh Schedule of the Constitution under the State list. Article 47 of the Constitution speaks about raising the level of nutrition and improving public health prospects where the State is responsible.^[8] However, let us recall that these were framed nearly seven decades ago, and these frameworks did not encompass public health security in times of disasters. Capacity-building exercises are conducted from time to time, but civilian involvement in these exercises in a phased manner is absent. Citizens do not have basic first aid and life survival skills and do not have an emergency contact directory. Most medical doctors have not gone through formal disaster management training in medical schools and have limited knowledge on what can be done during any disaster. Only a few nongovernment organizations working in isolated quarters and with fragmented thinking are performing their duties which are deeply insufficient. Policies in the past have not viewed public health in disasters as a priority. But, we cannot live in 2019 with laws framed in 2005 based on knowledge secured in the late 1990s. In the past 20 years, around 3 million people have perished and over 800 million and more have been affected disproportionately. The potential for outbreak and epidemics exists during natural disasters but is rare.^[9] We chose to challenge this statement because estimate of outbreaks is sometimes masked and often ignored in the light of lack of disaster preparedness in low- and middle-income countries. Underreporting is also a common practice among many of these nations. Most of the states around the country do not have Advisory bodies to SDMA and DDMA. And if there are any, there is no dedicated financial capital provided for the members of the advisory bodies to perform their duties. The advisory body if constituted meaningfully including all stakeholders such as Public Health Doctors, Architects, Social Scientists, and Engineers will go a long way to promote national resilience in times of disasters. A public interest litigation was filed in the Supreme Court of India by Dr. Edmond Fernandes VS Union of India and others seeking the court intervention to direct all the states under the Union of India to set up advisory committee with domain experts.^[10] Unfortunately, the court dismissed the petition stating that the petitioner can approach the court in respect of a particular state when an eventuality arises. Disaster management calls for preparedness and institutional capacity building, not firefighting disasters when eventuality arises.

The solution to this problem is not complex; it requires disaster risk reduction to be prioritized and

resilience to be triggered. The country must prepare civilians from every district who are well-versed with the working plan for Disaster Management and an emergency roster of civilian ready responders must be documented. A "White Paper" should be brought out in parliament about the "State of the Nation for Disaster Resilience." India's public health system is in crisis. With a triple burden of disease affecting India in the form of infectious diseases, noncommunicable diseases, and re-emerging diseases, India will have to tighten the strings on national disaster resilience. Setting up a PHLDR can be one of the options to regulate this institutional and legal framework. Through this law, medical colleges and hospitals across the country must be directed compulsorily to conduct on-campus disaster sessions every year and initiate public health in emergencies training programs in collaboration with civil society organizations working in the fields.

The state of Gujarat in India set up what is called Gujarat Emergency Medical Services Act, 2007. This act provides to create a network of emergency medical services during disasters resourcing public and private options to ensure quality care by training health professionals and regulating standards for ambulances and hospitals that offer emergency services.^[11]

In 2013, the Abe administration in Japan passed a landmark Basic Law of National Resilience to protect the people of Japan.^[12] Drawing inspiration from the Japanese leadership, Indian parliamentarians need to take moral responsibility for the lives of the people from their region and deliberate on the need for the law. The lives of Indians cannot be less important than the Japanese counterpart when the problems we face with regard to disasters are shared if not more.

Acknowledgment

The authors express their profound gratitude to Ms. Mary Cardoza, from Mumbai, India for having proofread the entire paper.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Edmond Fernandes¹, Sanjay Zodpey²

¹CHD Group and Member - Health Task Force, DDMA, Government of Karnataka, Karnataka, ²Public Health Foundation of India and Director - Indian Institute of Public Health, New Delhi, India

Letters to Editor

Address for correspondence:

Dr. Edmond Fernandes,
CHD Group and Member - Health Task Force, DDMA,
Government of Karnataka, Karnataka, India.
E-mail: indiaoffice.edmond@gmail.com

Received: 07-04-2019

Accepted: 09-05-2019


Published: 05-08-2019

References

1. National Disaster Management Institute. India Disaster Report 2011. New Delhi: National Disaster Management Institute; 2012.
2. Thakur P. India Third most Disaster Prone in 2015: UN Report'. The Times of India; 2016. Available from: <http://timesofindia.indiatimes.com/india/India-third-most-disaster-prone-in-2015-UN-report/articleshow/50964247.cms>. [Last accessed on 2019 Apr 13].
3. Kamath R, Fernandes E, Narayan P. Medical relief during the Nepal earthquake: Observations and lessons to learn. South East Asia J Public Health 2015;5:77-8.
4. Krol DM, Redlener M, Shapiro A, Wajnberg A. A mobile medical care approach targeting underserved populations in post-hurricane Katrina Mississippi. J Health Care Poor Underserved 2007;18:331-40.
5. Mokdad AH, Mensah GA, Posner SF, Reed E, Simoes EJ, Engelgau MM, *et al.* When chronic conditions become acute: Prevention and control of chronic diseases and adverse health outcomes during natural disasters. Prev Chronic Dis 2005;2:A04.
6. Ford ES, Mokdad AH, Link MW, Garvin WS, McGuire LC, Jiles RB, *et al.* Chronic disease in health emergencies: In the eye of the hurricane. Prev Chronic Dis 2006;3:A46.
7. Ministry of Law and Justice. The Disaster Management Act 2005. New Delhi: The Gazette of India Extraordinary; 2005.
8. Bakshi PM. The Constitution of India. 12th ed. New Delhi, India: Universal Law Publishing Co. Pvt Ltd.; 2013.
9. Eric N. The Public Health Consequences of Disasters. New York: Oxford University Press; 1997.

10. Pinto S. Mangalorean Doctor Files PIL in SC for State Advisory Bodies on Disaster Management. Times News Network; 7 December, 2016. Available from: <http://timesofindia.indiatimes.com/city/mangaluru/Mangalorean-doctor-files-PIL-in-SC-for-state-advisory-bodies-on-disaster-management/articleshow/55851782.cms>. [Last accessed on 2019 Apr 17].
11. Government of Gujarat. Gujarat Emergency Medical Services Act. Government of Gujarat; 2007. Available from: <http://www.gsdma.org/policies-acts/gujarat-emergency-medical-services.aspx>. [Last accessed on 2016 Sep 25].
12. Government of Japan. Basic Act for National Resilience Contributing to Preventing and Mitigating Disasters for Developing Resilience in the Lives of the Citizenry, Japan. Government of Japan; 2013.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online	
Quick Response Code: 	Website: www.ijhas.in
	DOI: 10.4103/ijhas.IJHAS_19_19

How to cite this article: Fernandes E, Zodpey S. India requires a public health law for disaster resilience. Int J Health Allied Sci 2019;8:214-6.
© 2019 International Journal of Health & Allied Sciences | Published by Wolters Kluwer - Medknow