## Disaster Medicine and Public Health Preparedness

www.cambridge.org/dmp

## Letter to the Editor

**Cite this article:** Mukhida S, Das P, Das N, Khan S, Kannuri S. Medical aid in natural disasters: India an emerging global power. *Disaster Med Public Health Prep.* **17**(e467), 1–2. doi: https://doi.org/10.1017/dmp.2023.127.

**Corresponding author:** Nikunja Kumar Das; Email: nikunjdas3085@gmail.com

© The Author(s), 2023. Published by Cambridge University Press on behalf of the Society for Disaster Medicine and Public Health.



## Medical Aid in Natural Disasters: India an Emerging Global Power

Sahjid Mukhida MD<sup>1</sup><sup>®</sup>, Pankaj Das MD<sup>2</sup>, Nikunja kumar Das MD<sup>1</sup><sup>®</sup>, Sameena Khan MD<sup>1</sup> and Sairam Kannuri MD<sup>1</sup>

<sup>1</sup>Dr D Y Patil Vidyapeeth University Dr D Y Patil Medical College Hospital and Research Centre, Pune, Maharashtra, India and <sup>2</sup>Armed Forces Medical College, Department of Dermatology, Pune, Maharashtra, India

The definition of disaster varies and is contested, but the most relevant and apt definition recognized by the United Nations is "a serious disruption of the functioning of a society, causing widespread human, material or environmental losses which exceed the ability of the affected society to cope using only its own resources."<sup>1</sup> More than 2.6 billion people have been affected in the last decade by natural phenomena such as earthquakes, cyclones, tsunamis, landslides, floods, heat waves, or severe cold weather.<sup>2</sup> These disasters lead to mass casualties that can overwhelm local medical resources and prevent providers from delivering comprehensive and definitive medical care. Although any country may be overwhelmed with mass casualties, it is the developing countries who are especially at risk as they lack necessary know-how and resources to be prepared for disasters. At the time of need, certain international agencies like the United Nations (UN) and the World Health Organization (WHO) do come forth to help the affected countries, but is often not enough.<sup>3</sup> Western/developed countries have been providing assistance to countries struck by disaster in the form of financial and technical aid. In the past few years, India, despite being a developing country and economy, has emerged as a one of the key providers of immediate disaster aid to the affected countries.

India has seen its share of disasters in the past. The Himalayas in the north and the seas surrounding the peninsula makes the country prone to earthquakes, cyclones, tsunamis, and floods. The devastating super cyclone which struck Odisha in 1999 and the Gujarat earthquake in 2001 led to some concrete steps at the national level by setting up National Disaster Management Authority (NDMA) and National Disaster Response Force (NDRF) in 2005 and 2006, respectively. The country was relatively better prepared to face the disasters those followed: the Asian tsunami (2004), earthquakes (Andamans 2009; Sikkim 2011), and floods (Uttarakhand 2013; Jammu and Kashmir 2014, and Kerala 2018) The capability to provide aid to other countries was demonstrated in the wake of the earthquake that struck Nepal in 2015 and the recent earthquake in Turkey in February 2023.

Nepal was struck with an earthquake with magnitude of 7.9 which caused widespread destruction in 30 districts causing over 7000 casualties.<sup>4</sup> An estimated 8 million people were affected by the quake. Many buildings in Kathmandu and adjoining cities were reduced to rubble. There were shortages of safe drinking water, food, fuel, and electricity. The mountainous terrain made it extremely difficult for disaster response teams to reach the worst hit countryside. Indian leaders and diplomats got in touch with their counterparts in Nepal immediately and assured them of India's commitment and goodwill of her people to help their country. The operation was named as "Maitry," meaning friendship. India's rescue team consisting of relief workers, medical aid, and heavy earth moving equipment landed at Kathmandu within first 6 h of the quake. Aircraft from the Indian Air Force (IAF) ferried medical teams, relief material, food, water, and heavy earth moving equipment. Choppers were pressed into service to deploy rescue teams, medical teams, and relief material in the interior areas and evacuate casualties. These teams worked round-the-clock and in close co-ordination with the administration of Nepal. India also deployed a 45-bed hospital and 3 field hospitals from the Indian Army with 18 medical teams, for casualty evacuation and to provide medical support to the affected population. India still is involved in long-term rehabilitation for the people of Nepal by reconstructing necessary infrastructure.<sup>4</sup>

An equally strong earthquake of 7.8 struck Turkey on February 6, 2023, and took a devastating toll killing more than 44,000 people.<sup>5</sup> Some cities in whole were reduced to rubble. The Indian government promised proactive and prompt support to the disaster struck nation. The operation was named as "Dost" this time, which means "friend" in both Hindi and Turkish. Indian C-17 aircraft carrying a mobile field hospital from Indian Army, teams from NDRF, essential medical supplies, and relief material were the first ones to land on the Turkish soil. The NDRF team managed to rescue a 6-y-old girl from being under the rubble for more than 3 d. The medical team performed some emergency surgeries and catered to outpatient services in the quake affected areas. The IAF aircrafts continued to ferry essential supplies consisting of food, mobile shelters, winter clothing, blankets, essential medicines to the quake prone areas over the following 2 wk. The Indian team performed a stupendous job in providing man, material, and

medical support to the people of Turkiye in need and were well appreciated in the international community. India in recent times have not only strengthened and streamlined its own disaster response, but also have started to aid those who need it across the world.<sup>5</sup> Overseas deployment of medical and relief teams will bring back valuable lessons in identifying choke points. Resolving those choke points would prepare our teams even better for future calamities. India is showing to the world that it truly believes in its philosophy of "Vasudhaiva Kutumbakam" meaning "World is a family".

## References

 Ciottone GR. Introduction to disaster medicine. *Disaster Med.* Published online 2006:3-6. doi: 10.1016/B978-0-323-03253-7.50008-X

- Das NK, Patil R, Prasanna S, et al. Drones for medical supply during disaster: a game changed in "Health for All Policy". *Health Serv Insights*. 2023;16. doi: 10.1177/11786329231160013
- 3. UN Disaster Assessment and Coordination (UNDAC). OCHA. Published February 24, 2017. Accessed March 18, 2023. https://www.unocha.org/ourwork/coordination/un-disaster-assessment-and-coordination-undac
- Goyet S, Rayamajhi R, Gyawali BN, et al. Post-earthquake health-service support, Nepal. Bull World Health Organ. 2018;96(4):286-291. doi: 10.2471/ BLT.17.205666
- Canpolat N, Saygılı S, Sever L. Earthquake in Turkey: disasters and children. *Turk Arch Pediatr.* 2023;58(2):119-121. doi: 10.5152/TurkArch Pediatr.2023.160222