

EARTHQUAKE: DISASTERS DEMAND PREPAREDNESS

Muhammad Hussain Khan and Habib-ullah Khan

Earthquake disasters are of an increasing global health concern. More than 500,000 earthquakes are documented each year. Although the vast majority of these are too small or too remotely located to be felt by humans, approximately 3000 are perceptible by human populations, of which 7 to 11 result in significant loss of life.^{1,2}

The earthquake of October 8, 2005, in the Northern areas of NWFP and Kashmir regions of Pakistan brought an unprecedented human tragedy. It shook the whole Pakistani nation. This huge earthquake is believed to have affected 3.5 million people. According to South Asia Earthquake Update, November 3, 2005, the Federal Government of Pakistan declared the following casualty figures from this earthquake:

- o Area affected 30,000 sq km.
- o Population affected 3.5 million.
- o Human loss 57,000.
- o Injured 77,000.
- o Houses 70% destroyed; 30% damaged.
- o Families affected 500,000.

The response of the nation was highly commendable. Every child and elderly turned out to be a social worker. Army was known as a force for rescue and relief. Right after the disastrous tremor, the major challenge was the provision of medical aid to the critically injured survivors. We lacked the much needed infrastructure and skilled human resources to face this emergency of unexpected magnitude.

Fifteen years ago, disaster management was very simple. Rescue workers used to rush to the area to help the victims and certain agencies used to step in to provide temporary shelter and food. Usually within weeks after the disaster, most people would forget about it until the next one.

Over the past decade, the public health approach to disaster has changed significantly. Today, disaster management is recognized as a significant priority of public health system. Prevention, mitigation and preparedness are part of the vocabulary of public officials in both the national and international media and organizations.^{3, 4}

Public health professionals can help communities prepare for disasters and protect the health of affected population through prevention and protection programs. The cycle of crisis planning provides a systematic approach for preparing and managing disasters. It includes four cyclical stages of mitigation, preparedness, response and recovery.

Mitigation refers to the activities that reduce suffering and hasten the recovery. Preparedness helps communities react to an emergency through planning, exercises and training. Response means actions; warning, evacuation, sheltering, legal and medical actions. Recovery refers to rebuilding lives of the affected population and includes reconstructing infrastructure and facilities.

The role of public health in disasters is certainly not new but is now being recognized and highlighted.

Media coverage plays an important role in the management of a disaster. It can be considered a potential intervention strategy and an effect modifier. The use of media to provide warning and forecasts can play a crucial role in limiting the short-term effects of a disaster.⁵

Earthquakes will continue to affect human populations. With technologic advances, new building designs and built environment will improve the situation over time.

There is a critical need for evidence-based prevention and preparedness efforts and earthquakes provide an ongoing challenge to the field of epidemiology.

Public health preparedness has become a high priority of governments that must have ability to predict, prevent and control disasters and their consequences. Adequate fund and political will are crucial to achieve this purpose.

The effects of a disaster last for a long time. Disaster-affected countries deplete many of their financial and material resources. Epidemiology as the applied instrument of public health interventions can provide much needed information on which an effective and flexible policy for the management of a disaster can be based.

Disasters demand preparedness. Let us all get prepared to face the challenge of any disaster in future and pray Almighty Allah to give us the will and power to help the mankind at the times when we are needed.

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