

Community emergency/disaster preparedness

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A disaster is defined as a natural or manmade event that results in an imbalance between the supply and demand for existing resources.¹ Although disasters are routinely characterized by certain characteristics, each is unique.²

Natural disasters, including floods, earthquakes, hurricanes, and tornadoes, occur regularly. Manmade disasters include technical accidents and structural collapses, chemical incidents, and nuclear-radiation incidents. Acts of terrorism, defined as the "unlawful use of force or violence against persons or property to intimidate or coerce a government or civilian population in the furtherance of political or social objectives," are now a real threat. A common consequence of many natural and manmade disasters is population displacement and subsequent resettlement.

The Disaster Medicine has matured tremendously during the last decade. The hospital preparedness has changed from just a response to any major event to a series of phases, including mitigation, preparedness, response, and recovery.³ Mitigation means those sustained measures and activities aimed at reducing or eliminating matters associated with disasters, or lessening the impact of the event. Preparedness means those actions and activities undertaken in advance to identify resources and ensure that individuals and agencies will be ready to react should an emergency occur. Response means any action taken immediately before, during or directly after an emergency occurs to save lives, minimize damage to property and enhance the recovery process. Recovery refers to efforts geared toward full resumption of services, after an emergency or disaster has occurred.

The recent terrorist actions around the globe suggest that it would be prudent for hospitals to improve their preparedness for a mass casualty incident. In the event of a disaster, the community expects hospitals to be ready to provide acute care medical services to victims. Published reports reflect a wide variation in the effectiveness of hospitals' performances in managing their response during these major emergencies. Many occasions revealed a medical system that was ill-prepared to maintain a medically safe environment and essential health care services for their patients.^{4,5} Experts have recognized the need for improved hospital preparedness that addresses the full range of potential disasters.⁶

Because of the unique role that hospitals play in supporting community requirements during disasters,^{7,8} increasing attention need to be focused on improving their emergency management capabilities so that they can maintain continuity of operations as well as provide medical surge capacity and capability if needed. Numerous initiatives have been developed that have influenced the emergency management capabilities.⁹

The objective of medical planning for disasters is to be able to meet the imbalances that arise between needs and available resources in the event of a major accident or disaster. The first task of the emergency management planning team is to conduct a hazard vulnerability analysis (HVA). An HVA identifies potential threats, risks, and emergencies and the potential impact these emergencies may have on the community.¹⁰ It is a formal assessment of the risks that could potentially affect the community and move it to implement its emergency management plan.

An all-hazards approach enables communities to be prepared to manage any number or type of emergencies. It facilitates prevention, preparation, response, and recovery, based on the broad scope of what could happen within and beyond the community. Conducting a risk assessment involves proactively identifying what might affect the community and its surrounding area.

The integrated emergency management/ disaster plan is designed to meet the needs defined for the community based on its hazard vulnerability analysis, its goals for preparedness and response planning, and its current capacities and capabilities. The main objective of the emergency/ disaster plan is to optimally prepare the staff and institutional resources of the hospital for effective performance in different disaster situations. It should address not only the mass casualties which may result from Mass Casualty Incident that has occurred away from the hospital, but should also address the situation where the hospital itself has been affected by a disaster — fire, explosion, flooding or earthquake. Since all disasters have their own special characteristics, a great deal of flexibility is needed as well as the capacity to improvise. The needs of vulnerable populations should be considered by planning teams.

The plan should be a living document that must be reviewed, updated, and tested as risks, goals, and

capabilities change over time. The plan should clearly describe areas of responsibility, the circumstances under which the plan is to be activated, who is initially in charge, and who is authorized to activate the plan.⁴ The plan also should outline alternative roles for personnel during emergency situations, including whom they should report to within a command structure. Roles and responsibilities must be determined in advance because, during an emergency, turf battles or lack of clarity about who is to do what can result in lost time, resources, and perhaps lives. Operational duties and goals for key positions can be provided in checklist format. Cooperation between agencies and organizations is necessary to run the disaster operations successfully, in both the planning stage and in the operative work.

Communitywide emergency preparedness and response training, exercises, and drills allow communities to test their plans, identify weaknesses, and correct those to reduce the risk of process failures during an actual emergency. Individuals responsible for responding to a disaster situation must be identified and trained.

With all the prevailing challenges, there is an urgent need to consolidate our agenda for disaster preparedness. There is a need to move from 'reactive' to 'proactive' mode of disaster surveillance whereby a system that would detect all the signs of impending disaster is in place so as to reduce the extent of destruction. There is also a need to equip ourselves with all the armaments of disaster preparedness. Training for health care providers needs to be

in place as well as the programmes to train our own trainers. Finally, there should be a healthy co-operation and co-ordination between government and non-governmental agencies — united with only one aim of helping mankind in the face of disaster.

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