

Editorial

Disaster management in Hospitals

Sathiadas MG

The WHO has defined disaster as “a serious disruption of the functioning of a community or a society involving widespread human, material, economic, or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources”. Hospitals are put on test when its resources are affected when the number of patients flowing increases its capacity.

During the dengue epidemic experienced in Jaffna during the monsoon months saw the highest surge of patient inflow into hospitals in the Northern Province. Disaster preparedness is a key to strategic management during the crisis. It is a team effort of many including the clinicians and administrative staff. Disasters are caused by hazards. Hazards cannot be prevented but disaster can be prevented by a well-executed structured plan.

All hospitals should have their individual disaster management plan based on the available resources. Disaster can be prevented by managing the vulnerability of the hospital structure. Vulnerability increases with uncoordinated patient flow, poor crowd control, absence of triage, inappropriate emergency management and poor record keeping system. In other words, disaster is failing to manage the escalation of daily emergency.

Outbreaks of dengue has been increasing over the years, causing a surge in patients overwhelming the service and human resources (1). The additional burden of supplying intravenous fluids, medicines and blood products increases. Patient safety is compromised due to increased workload of the staff and decreased quality of care. Therefore, a preparedness plan is important.

The outbreak of dengue will last for several weeks and the hospital also needs to manage regular daily patients. The four phases of disaster are preparedness, prevention or mitigation, response, and recovery (1).

The preparedness phase includes the hospital incident command system comprises the incident reporting and daily action plan to manage the surge of patients. Communication and coordination are important components of surge management. During the surge of patients as the space of hospital is overwhelmed,

other hospitals in the region of outbreak, which do not have full bed occupancy, can be used. This coordination needs prior planning, and this model was tested during the covid-19 pandemic (2). Sri Lanka has seasonal surges of dengue infections, and an early warning system can help to overcome the extra space, human resources, laboratory services, funds and logistics. We lack such early warning systems hence we face immense difficulties during the surge. Subacute units in the hospital should be identified with inter departmental coordination to manage staff and equipment (2).

Primary and secondary triaging is necessary at emergency areas to categorize patients. The surge may interrupt regular services, hence a separate unit consisting of emergency, outpatient, inpatient and critical care needs to be planned.

Treatment protocols that are dynamic are needed and adjusted based on the clinical evidence for patient safety and surge of the patient. Capacity building and clinical case management are crucial during the surge. Each individual must understand his or her roles and responsibilities. This can be achieved by simulation exercises (3).

Having real time database will help in planning human resources and logistics. Predictive analysis can be done to anticipate future problems and actions can be planned.

Research is also an integral part of disaster management as it can help prepare for subsequent outbreaks and improve the response.

Philosophy of care, policy, and management has an enormous impact on hospital capacity. This should be clearly communicated to all staff and implemented throughout the hospital. The management team must encourage a clear and constructive communication culture throughout the organization. Teamwork, trust, social interdependence, and communication have a major impact on productivity (4,5).

Hence hospitals like Teaching Hospital Jaffna catering for the entire Northern region should have a meticulous multisectoral disaster management plan to overcome the surge. During the war the surge in war casualty

was well managed with cooperation with all the sectors but there was a clear struggle seen during the dengue surge suggesting a lack of vision and multisectoral cooperation. The lack of awareness regarding disaster management among the hospital administrators was clearly seen. Both patients and the health staff who were overburdened by the surge were getting burnt out. A clear plan with good communication, commitment and prior training of all involved within the sectors can help to manage disasters in tertiary centres like the Teaching Hospital, Jaffna.

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