

Disaster Management: An Overview

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Abstract: Disaster is a sudden, calamitous event bringing huge destruction, loss, and devastation to life, environment and property. The damage caused by disasters is immeasurable and varies with the geographical location, climate and the type of the earth surface/degree of vulnerability. This effects the psychological, social, economic, political and cultural condition of the affected area.

Introduction:

Disaster is the prefix “dis- bad + aster- star”. Word disaster’s root is from astrology: This implies that when the stars are in bad position a bad event will happen.

TYPES OF DISASTER

<p>Major natural disasters:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Flood <input type="checkbox"/> Cyclone <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake 	<p>Minor natural disasters:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Cold wave <input type="checkbox"/> Thunderstorms <input type="checkbox"/> Heat waves <input type="checkbox"/> Mud slides <input type="checkbox"/> Storm
<p>Major manmade disaster:</p> <ul style="list-style-type: none"> • Setting of fires • Epidemic • Deforestation • Pollution due to prawn cultivation • Chemical pollution. • Wars 	<p>Minor manmade disaster:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Road / train accidents, riots <input type="checkbox"/> Food poisoning <input type="checkbox"/> Industrial disaster/ crisis <input type="checkbox"/> Environmental pollution

DISASTER MANAGEMENT

'Disaster management can be defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters.

DISASTER MANAGEMENT COMMITTEE

The following members would comprise the disaster management committee under the chairmanship of medical superintendent/ director

- Medical superintendent/ director
- Additional medical superintendent
- Nursing superintendent/ chief nursing officer
- Chief medical officer (casualty)
- Head of departments- surgery, medicine, orthopedics, radiology, anesthesiology, neurosurgery
- Blood bank in charge
- Security officers
- Transport officer
- Sanitary personnel

Importance of Information and communication

Information plays an important role in empowering the personnel involved in disaster management at various levels.

- ❖ Relevant proactive information can go a long way in handling such situations and in preparing to meet the same.
- ❖ Information need takes different dimensions in different situations.
- ❖ The personnel who need information on disaster management range from health sector managers, epidemiologists, primary health care physicians, nurses, sanitary engineers, academicians, researchers, disaster mitigation personnel, social service organizations, to the common man.

Need for a Disaster Management Database

A very important step in effective management of disasters is bridging the information gap. Libraries play a very important role in achieving this by harnessing and disseminating information resources. Developing an efficient disaster management information system is an important stage in planning for disaster preparedness.

Proactive information

Following the dictum prevention is better than cure; people should be empowered with information at the pre-disaster level for disaster preparedness.

- ❖ Identification of zones which are prone to earthquakes, floods etc., within which safer location for hospitals etc.
- ❖ Awareness regarding use of non- eco friendly materials (use of plastic bags in Mumbai)
- ❖ Need for preservation of ecological balance (prevention of the destruction of mangrove stretches)

During a disaster

- Messaging
- Warning / alerting systems
- Help lines to contact
- Alert regarding health hazards

Post Disaster

- information on various rehabilitation activities
- documentation of the details of the incident and the mitigation undertaken
- drawing future plans for prevention of disaster

DISASTER MANAGEMENT CYCLE

Disaster management cycle includes the following stages/ phases

1. Preparedness phase
2. Response phase
3. Recovery/ Rehabilitation phase
4. Risk Reduction/ Mitigation phase

Preparedness phase – This phase involves the *development of awareness* among the population on the general aspects of disaster and on how to behave in the face of a future disaster. This includes *education* on warning signs of disasters, methods of safe and successful evacuation and first aid measures.

Response phase – This is the period that immediately follows the occurrence of the disaster. The ambulances and medical personnel arrive, remove the injured for transportation to medical camps or hospitals and provide first aid and life support.. One can even find injured victims help other injured ones. The needs of the population during this phase are immediate medical help, food, clothing and shelter.

Recovery phase – When the immediate needs of the population are met, when all medical help has arrived and people have settled from the hustle – bustle of the event, they begin to enter the next phase, the recovery phase which is the most significant, in terms of long term outcome.

- It is during this time that the victims actually *realize the impact* of disaster. It is now that they *perceive the meaning of the loss* that they have suffered. They are often housed in a camp or in some place which is often not their house, along with other victims.
- During this time, they need *intensive mental support* so as to facilitate recovery. When the victims have recovered from the trauma both physically and mentally, they realize the need to return back to normal routine. That is, to pre-disaster life.
- During this phase, they need resources and facilities so as to enable them to return back to their own homes, pursue their occupation, so that they can sustain their life on their own, as the help from the government and other nongovernmental organizations is bound to taper in due course. Thus, they are provided with a whole new environment, adequate enough to pursue a normal or at least near normal life. This is called *Rehabilitation*.

Risk reduction phase – During this phase, the population has returned to predisaster standards of living. But, they recognize the need for *certain measures which may be needed to reduce the extent or impact of damage during the next similar disaster*.

- For example, after an earthquake which caused a lot of damages to improperly built houses, the population begins to rebuild stronger houses and buildings that give away less easily to earthquakes.
- Or, in the case of tsunamis, to avoid housings very close to the shore and the development of a 'green belt'- a thick stretch of trees adjacent to the coast line in order to reduce the impact of the tsunami waves on the land. This process of *making the impact less severe* is called *Mitigation*.

Roles of the Nurse as a Manager in Disaster Preparedness

1. Preserving Open Lines of Communication

- Communication allows staff to gather the information necessary to perform well. Communication difficulties are normal during disasters. Loss of electrical power and overcrowding may cause telephone-dependent systems to fail. Messages not heard can cause confusion and panic.
- The nurse as manager has to consider how to internally and externally implement and distribute accurate information to the proper individuals. Further, he must ensure constant communication with Department of Health medical director, head nurse, incident command center and Centers for Disease Control contacts.

2. Ensuring Quality Patient Care

- In times of disaster, confusion reigns and people need to work together as a team to achieve the same objective.
- The nurse as manager coordinates departmental efforts such as patient flow and bed counts.
- He interacts with the system to ensure the provision of quality care to disaster victims. This includes tracking patients carefully in the organization so that relatives and friends can be apprised of their condition and location.

3. Providing Current Education

- All nursing staff members should be aware of their role in the disaster plan and receive adequate training.
- In some cases, only those nurses in the organization perceived as critical care or emergency experts are trained.
- All medical and allied staff should receive instruction as first responders because in the case of large-scale destruction, there will be an increased need for the services of all types of employees.
- Further, nurses are often in a position to teach not only staff, but also the community about disaster preparedness.

4. Influencing Policy and Financial Decisions

- Disaster preparedness costs money. Nurses as managers have a part in determining costs, managing allocation, and advocating for expenses within a policy framework.
- Ways to influence the distribution of monies include participating in the state hospital associations and testifying before state legislatures so that policy makers are clear about the impact of decisions.

5. Providing Security for Staff, Patients, and Families

- In any given disaster situation the nurse as manager has to evaluate security issues for self, victims, and the first responder team.

- She needs to create entrance and exit standards for staff, patients, and visitors and implement lock-down procedures.
- She also should insure the security department is ready to maintain crowd and traffic control and avoid unauthorized access to the facility. Any disaster preparedness plan should include standards for dealing with the media

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