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Disaster and its Management

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Abstract: ***Disaster means a mishap, a calamity or seriously dangerous event occurred in an area and affects life and properties. It may be arising from natural or man- made causes, or by accident or due to negligence. This sudden event results in the substantial loss of life or create much suffering to humans and other life. It also includes much damage to, and destruction of, property, or damage to, or degradation of the environment. Different types of disasters happen all over the world at one time or the other. It is necessary to have an understanding of the types of disasters, their causes, characteristics and impacts. The purpose of this article is to know about the following aspects: what is a disaster, Types and Effects of Disasters and disaster management in detail.***

Keywords: Disaster risk reduction, Education, disaster management

1. Introduction

Natural and man-made disasters cause serious interference to a community, and there are many casualties, financial, environmental, social, and economic damages. As emergencies and disasters, are rising all over the world obtaining knowledge and its uses are regarded as the most effective way to prevent disasters. There is proof that most injuries, damages, and deaths from disasters can be prevented and disaster preparedness measures can reduce the damage caused by disasters and accordingly improve recovery. Officials and policy-makers have focused on developing a new approach for persuading people and making leaps in disaster risk reduction such as training the children, the general public and especially the teachers. Disaster education for vulnerable aims to provide knowledge, skills, motivation in individuals and groups to take actions to reduce their vulnerability to disasters.

During the last decades, some studies indicated that trained people in society can be prepared for disasters and respond well. In addition, some reported that disaster education is a functional, operational, and cost-effective tool for risk management. Further, some confirmed that low awareness and inadequate understanding of risk play a negative effect on people's readiness, response to hazard warnings, personal protection measures, and recovery.

1.1 What is a disaster?

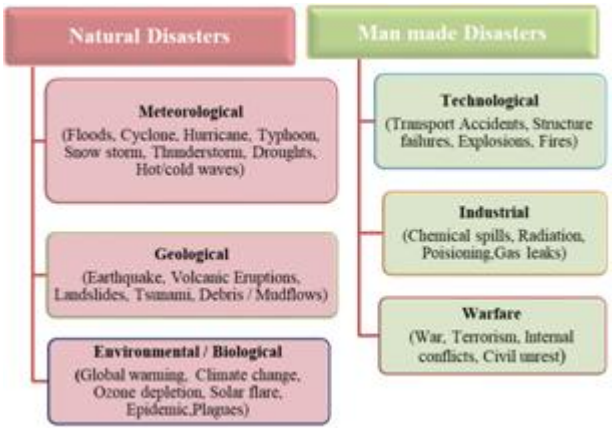
Disaster, as defined by the United Nations, is a serious disruption of the functioning of a community or society, which involve widespread human, material, economic or environmental impacts that exceed the ability of the affected community or society to cope using its own resources. Disaster management is how we deal with the human, material, economic or environmental impacts of said disaster, it is the process of how we "prepare for, respond to and learn from the effects of major failures". The combination of hazards, vulnerability and inability to reduce the potential negative consequences of risk results in disaster.

$$(\text{Vulnerability} + \text{Hazard}) / \text{Capacity} = \text{Disaster}$$

1.1.1 Types of disasters

There is no country that is immune from disaster, though vulnerability to disaster varies. There are two main types of disasters:

- Natural disasters: meteorological disasters like floods, hurricanes, geological like earthquakes and volcano eruptions and environmental like global warming, climate change. These disasters have immediate impacts on human health and secondary impacts causing further death and suffering from (for example) floods, landslides, fires, tsunamis.
- Man-Made Disasters as viewed by the International Federation of Red Cross & Red Crescent Societies are events that are caused by humans which occur in or close to human settlements often caused as a results of Environmental or Technological Emergencies. This can include: Environmental Degradation, Pollution, Accidents, fires, war, terrorism etc.



(https://www.asosaijournal.org/audit-of-disaster-management-an-experience-of-sai-nepal/)

Any disaster can interrupt essential services, such as health care, electricity, water, sewage/garbage removal, transportation and communications. The interruption can seriously affect the health, social and economic networks of local communities and countries. Disasters have a major and long-lasting impact on people long after the immediate effect has been mitigated. Poorly planned relief activities can have a significant negative impact not only on the disaster victims but also on donors and relief agencies. So it is important that physical therapists join established programmes rather than attempting individual efforts.

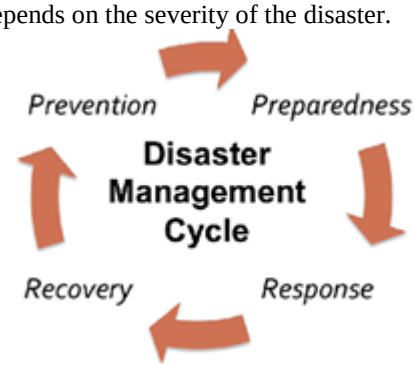
1.2 Disaster Management

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 efforts are geared towards disaster risk management. Disaster Risk Management "implies the systematic process of using administrative decisions, organisation, operational skills, and capacities to implement policies, strategies and coping capacities of the society and communities to lessen the impact of natural hazards and related environmental and technological disasters. These comprise all forms all activities including structural and non- structural measures to avoid (prevention) or to limit (mitigation and preparedness) adverse effects to hazards". There are three key stages of activities in disaster management:

1) Before a disaster: to reduce the potential for human, material, or environmental losses caused by hazards and to ensure that these losses are minimised when disaster strikes
2) During a disaster: to ensure that the needs and provisions of victims are met to alleviate and minimise suffering
3) After a disaster: to achieve rapid and durable recovery.

1.3 Disaster Management cycle

The disaster management cycle does not always, or even generally, occurs in isolation or in this precise order. Often phases of the cycle overlap and the length of each phase greatly depends on the severity of the disaster.



1.4 Prevention

The first phase is focused on taking precautionary measures before an actual disaster or emergency takes place to reduce its scope. Prevention includes the process of danger identification, assessment of life and property threat in order to limit potential causalities, and adverse impact of natural and technological hazards. Improving environmental policies, raising people's awareness through education and carrying out correct risk assessments all constitute for primary objectives of this stage. Actions typical for prevention phase are performed and last infinitely until a disaster strikes.

1.5 Preparation

The preparation phase is centred around arranging or developing a plan to approach events after the incident crops up. This phase is focused on increasing resilience through arranging and planning efficient measures to counter a disaster or effects of thereof. Those activities are tailored to minimise the damage disaster causes, improving response operations on institutional and individual levels. They also include: Planning emergency access, evacuation routes, training (emergency teams, practice drills), Supply (providing emergency response equipment)

1.6 Response

Unlike prevention and preparation phases, response is undertaken during a disaster situation. The aim of the response procedures is to save lives, reduce victims' suffering and alleviate economical losses. Crucial for this phase is the implementation of the plans formulated and prepared prior to the event in the preparation phase. Numerous organisations, such as state emergency units, police forces, fire brigades and ambulances, are deployed to combat the immediate effects of the catastrophe.

1.7 Recovery

During a recovery phase, which takes place after an incident had occurred, affected community is assisted in restoration of concerned area. The phase comprises initial rehabilitation during which services are restored to their regular order, so local governments and responsible agencies regain the ability to manage the ongoing recovery processes and repair of social, physical and economic damage. Recovery also concerns long term reconstruction of health, utility and communication facilities. Finally, efforts to reduce future risk factors should also be included in the plan.

2. Conclusion

Disaster management is the only way to mitigate the effects of all these hazards. India has efficiently handled the recent cyclones and reduced the effects to bare minimum level. It was possible due to advance planning. Advance planning is always needed to keep the items of emergency for any disaster.

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