



HEALTHCARE ADMINISTRATIVE CHALLENGES & SOLUTIONS IN DISASTER MANAGEMENT IN INDIA.

General Medicine

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ABSTRACT

Background: Despite the improvement in health system response to various disasters, research is still in its infancy in Indian subcontinent.

Objective: This paper provides an overview of the Healthcare Administrative challenges & Solutions of disaster health management in India, with its aim to promote the efficient & effective healthcare response for reducing disaster-related mortality and morbidity.

Design: A systematic scoping review method was used to access the recent progress of and challenges and their solution to disaster management in India.

Results: The review found that since last decade considerable progress has been achieved in India. However, there remain challenges. It hinders effective health disaster responses, including low standards of disaster-resistant infrastructure safety, underdeveloped triage skills, poor emergency coordination between hospitals, lack of portable diagnostic equipment and, the lack of specific disaster plans, surge capacity, and psychological interventions. Other challenges are the fragmentation of the emergency health service system, a lack of specific legislation for emergencies, disparities in the distribution of funding, and inadequate cost-effective considerations for disaster rescue. Robust Policy on disaster management and strengthening of National disaster management authority is demand of the day.

Conclusions: The challenges can be overcome by implementing strict policy strategies at multiple levels (e.g. community, hospital, and healthcare system level).

KEYWORDS

Challenges, administrators, Disaster, Hospitals

INTRODUCTION

Disaster, whether man made or natural, may occur at any place or time. No country is immune from disasters. India due to its geographical characteristics, vast network of railway services, population growth and laxity in safety norms is more prone to disasters. India as a country is vulnerable to a number of disasters, from earthquakes to floods. Poor and weaker members of the society have always been more vulnerable to various types of disasters. Disasters result in unacceptably high morbidity and mortality amongst the affected population. Damage to infrastructure and reduction in revenues from the affected region due to low yield add to the economic losses.

WHO defines disaster as "Any occurrence that causes damage, economic disruption, loss of human life and deterioration in health and health services on a scale sufficient to warrant an extraordinary response from outside the affected community or area."

There are some Natural disaster as Drought , Flood , Strong snow storm and dust , Animal and cattle diseases , Heavy rain, hail, lightening , Bird flu , Human and animal highly infectious disease. Some are notable manmade disaster like Fire in objects , Forest and steppe fire, Transportation accidents , Fallen through ice, Flood , Accidents /grenade, explosive substances etc.

As per World Bank estimate, during the period 1996 to 2000, because of natural and man-made disasters India lost approximately 2.25 percent of the Gross Domestic Product and 12.15 percent of the revenue annually².

In recent past, India faced devastating disasters like the Bhuj earthquake in 2001, the Indian Ocean Tsunami in 2004, the Kashmir earthquake in 2005, the Kosi floods in 2008, the Andhra Pradesh and Karnataka floods in 2009, the Leh cloudburst and the Uttarakhand floods in 2010 and the Sikkim earthquake in 2011. It is estimated that the cumulative losses of about Rs. 80,000 crores. These included the Indian Ocean Tsunami in 2004, which caused around 11,000 deaths and affected 2.79 million people in India, and the 2013 floods in Uttarakhand, which caused 5,748 deaths and affected 4,200 villages. Before this, India's major disasters included Cyclone Paradip in 1999, which caused around 10,000 deaths. According to the World Risk Index 2014, India is in the top half of all countries at risk from natural

hazards – and, more importantly, for many years it has severely lacked the capacity to cope with and adapt to these hazards³.

The government of India is putting all efforts to mitigate such losses but because of vast area and diversity a large number of administrative challenges are coming up in providing humanitarian assistance and disaster relief. The Vulnerability Atlas prepared by the Building Materials Technology Promotion Council (BMTPC) highlights that 58.6 percent of the geographical area in India falls within seismic zones III, IV and V which could face earthquakes of moderate to very high intensity. 12 percent of the geographical area, covering more than 40 million hectares, faces recurring floods, changing course of rivers and river erosion.

AIMS : to provide an overview of the status of administrative challenges & future solutions of disaster health management in India .

Objectives:

- 1) To identify the progress or current status of disaster management by the healthcare system in India;
- 2) To identify current administrative challenges;
- 3) To discuss future strategies to overcome these challenges

METHODOLOGY

This research is based on systemic review by secondary data analysis that defines and explains disaster impacts on hospitals, and reviews some challenges facing hospital disaster managers in the light of natural disaster events. These data have been gathered from peer reviewed journals, and some books and conference papers. The major health electronic databases including ProQuest, PubMed, EBSCO, Science Direct Database were searched to identify publications such as public reports and peer-reviewed journal articles, which were relevant to the research aims. The various govt report were studied to collect information on administrative challenges & solution suggested by various committees and groups were included.

Impact of Natural Disasters on Hospitals

Hospitals play critical roles in disaster events by providing essential medical care . However, due to the nature of disasters the demand for health care services can rapidly and unexpectedly increase. Thus, without appropriate planning, a disaster can overwhelm the functional

capacity and safety of a hospital. In disaster events, access to patient documentation and medicine can be affected and it is important to keep these in the safe. Also, supplying food and essential medicines, especially in the early hours of a disaster are crucial, and must be considered by disaster managers.

Therefore, it is important to manage hospitals appropriately so that they are able to withstand better the impacts of disasters. For instance, it is important to provide security and preserve certain critical areas of the hospital, such as the emergency department, intensive care units, diagnostic facilities, operating rooms, pharmacy, food and medicine stores, and services registration and booking. These all need to be a focus for hospital disaster management.

Disaster Management in Indian Hospitals

Communities worldwide have been facing an increasing frequency and variety of disasters, and such incidents can have direct and indirect impacts, thus there is an urgent need to reduce disaster risk.

Various report suggest following administrative challenges in India:

Healthcare Administrative challenges in India :

The data shows in most of the hospitals , there is a lack of preparedness. None of the hospital is equipped with Nuclear, Biological and radiological disaster in most of the cities in India.

Lack of preparedness

- Failure to anticipate and meet needs
- Lack of attention, experiences and lessons of previous disasters
- Lack of prior planning for disaster situations
- No previous training of personnel and lack of training programs
- Weak Compliance of Policies

Communication and information management

- Communication within the hospital
- Contact with the media
- Management of very important people and visitors
- Out-of-hospital communications

Logistics challenges

- Human resources management
- Inappropriate places for providing services to the injured
- Management of donations
- No emergency fund
- Security management

Technical challenges

- Admissions to the hospital
- Entry and exit management and discharging of injured patients
- Evacuation of hospitals (esp incase of internal disaster)
- Patient security
- Triage and prioritization of patients
- Equipment failure
- Systemic Inefficiencies Influencing Processes

Lack of coordination

- Absence of command unity and single commander
- Bewilderment of personnel and officials
- Coordination problems with volunteers who were referred to help
- Disobeying the orders of officials by personnel
- Fragmentation and repetition
- Frequent examinations of some injured
- Inappropriate interventions of unrelated individuals
- Intractable performance of tasks by staff
- Lack of coordination among hospital officials
- Lack of coordination among the authorities in different hospitals
- Lack of coordination among the prehospital emergency and hospital authorities
- No Incident Command System and not running if there was any
- medical staff not well-trained in managing severe psychological effects
- Lack of a guaranteed reimbursement to the disaster healthcare services
- *Inadequate cost-effective considerations.*

DISCUSSION

Disaster management is defined as “activities taken by the organisation regarding unexpected incidents, which are adversely affecting people or resources and threatening the continued operation of the

organization”.

In this study, the concept of disasters, impact of natural disasters on hospitals and its administrative challenges were explored. The Nepal earthquake and Uttarakhand cloud Burst revealed lack of preparedness was one of the major challenges of hospital administrator because of lack of previous training of personnel and training programs. Lack of prior planning for disaster situations were the most common problem faced in healthcare sector. This study also revealed that the healthcare facilities' preparedness for disasters was under challenge by the vulnerability of the physical infrastructure, inadequate disaster plans, and disaster resourcing, and funding considerations.

The study recommend as per opinion taken from various stakeholder as under :

- Need to Strengthen Capacities of all Stakeholders
- Need to Adopt Innovative Systems, Techniques and Technologies
- Currently, the fragmentation or lack of coordination of the emergency services in India hinders efficient disaster management. The close coordination of the medical rescue services (e.g. government and non-government, domestic and international) is essential to overcoming these challenges.
- Timely and effective responses to disasters require an organised disaster response system, which can provide the appropriate aid. Therefore, with all of those challenges it is significantly important to prepare hospitals and get lessons from previous experience.
- Clarify the division of responsibility among nodal institutions.
- Accountability mechanisms need to be specified.

Funding arrangements for disaster response.

- Risk-reduction funding
- Public-private partnerships should be looked at more seriously as alternative modes of financing
- Risk-transfer mechanisms and insurance should be scaled up to support risk reduction⁴.
- Capacity building and training activities

To fulfill this objective, initiatives need to be taken with regard to:

- (1) Coordination & Management
- (2) Planning, Training and Drills
- (3) Information and Communication
- (4) Safety and Security
- (5) Human Resources
- (6) Logistics, Supply and Finance Management
- (7) Continuity of Essential Services
- (8) Triage
- (9) Surge Capacity for Medical Response
- (10) Post-disaster Recovery
- (11) Patient Handling
- (12) Volunteer Involvement and Management
- (13) Area Level Networking of Hospitals
- (14) Coordination and Collaboration with Wider Disaster Preparedness Initiatives

Each hospital shall have its own Hospital Disaster Management Committee responsible for developing a Hospital Disaster Management Plan (HDMP). Members of this committee shall be trained to institute and implement the Hospital Incident Response System (HIRS) – for both internal and external disasters.

All these recommendation should be included in SOP of hospital and should be validated time and again to bridge the gap.

Conclusion

Disasters are characterized by suddenness of occurrence, vastness of damage, loss of life, property, disruption of communication and so on. Effective health relief management depends on anticipating disasters before they arise and identifying likely problems / needs. Consequently, systems approach should be formulated and adopted. Disaster preparedness must be undertaken long ahead through situational analysis, operational planning, and networking. In India networking of hospitals in disaster management will defiantly enhance capabilities, optimize output and increase affectivity⁵.

Effective disaster management of the health system is essential for disaster response. These challenges emanate from both the internal components of the health organizations and the external environment, which can directly or indirectly impede effective disaster health

management.

REFERENCES :

1. <http://apps.who.int/disasters/rep0/7656.pdf> , assessed on 20 Jan 2019
2. <http://www.insightsonindia.com/wp-content/uploads/2013/09/challenges-in-disaster-management.pdf>, assessed on 18 May 2018
3. Climate Development Knowledge Network (CDKN) , Strengthening disaster risk management in India: A review of five state disaster management plans, p-2, assessed on <http://www.indiaenvironmentportal.org.in/files/file/Strengthening%20disaster%20risk%20management%20in%20India.pdf> 25 May 2018 .
4. Ministry of Home Affairs. Report No. 5 of 2013. Performance audit of disaster preparedness in India. New Delhi: Comptroller and Auditor General of India. (www.cag.gov.in/content/reportno-5-2013-performance-audit-civil-disaster-preparedness-india-union-government).
5. Kaur J. Administrative issues involved in disaster management in India. *Int Rev Psychiatry*. 2006 Dec;18(6):553-7.