CODEN [USA]: IAJPBB ISSN : 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES

SJIF Impact Factor: 7.187
https://doi.org/10.5281/zenodo.7662115

Available online at: http://www.iajps.com *Review Article*

ROLES OF NURSES IN DISASTER MANAGEMENT IN HEALTHCARE- REVIEW

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Article Received: September 2022 **Accepted:** September 2022 **Published:** October 2022

Abstract:
Natural catastrophes harmed about 2 billion people worldwide between 2008 and 2018. According to the World Health Organization, countries and governments must always have catastrophe preparations and emergency health experts on hand. An integrative literature review was done to investigate nurses' catastrophe preparedness. Literature published in English since 2000 was searched using MEDLINE (PubMed), Google Scholar, and EMBASE databases. The willingness of nurses to respond to disasters has not been thoroughly examined. The majority of the time, this is not the case. Further research is needed to validate recent study findings and clarify the needs of nurses who respond to disasters and other health emergencies because nurses are vital to disaster response operations.

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Please cite this article in press Ali Abdullah Ibrahim Asiri et al, ***Roles Of Nurses In Disaster Management In Healthcare- Review.,*** *Indo Am. J. P. Sci, 2022; 09(10).*

INTRODUCTION:

Disasters have a huge influence not only on healthcare institutions and providers, but also on the lives of individuals and economies globally. For example, almost 2.6 billion people have been touched by disasters in the last ten years [1]. There are three critical things to understand about how disasters affect health. First, the World Health Organization (WHO) defines disaster as any incident that could end human life or cause health-related harm and necessitates immediate response with sufficient manpower and resources, as well as preparation, planning, response, and recovery by many agencies, including healthcare institutions [2]. Second, hospitals must build their capability in order to respond to disasters effectively; large-scale disasters have a negative impact on hospitals. Finally, being the largest healthcare provider group, nurses play key responsibilities in providing comprehensive treatment for injured persons and their families throughout the four crisis management phases [3].

Nonetheless, crises are significant for the entire world because of the devastation that occurs in society. Nurses are present and play an important role in response to emergencies and disasters [4]. During disasters, nurses use specific knowledge and abilities, as well as activities, to reduce the health and life-threatening dangers for victims [5]. It is critical to have nursing abilities in the event of a tragedy. Identifying hierarchies, awareness of emergency response plans, regular practice exercises, proper use of emergency equipment such as personnel protection equipment, following communication routes and channels, participating in exercise evaluation, and modification of response plan if necessary [6] are some of the skills required. Every member of the nursing profession should be held accountable for the situation. According to studies conducted around the world, the presence of a nurse in a crisis can cut the death rate by 50 to 70% [7]. Technical efficiency, the ability to use nursing techniques with specialized equipment, the ability to perform physical examinations, clinical decision-making skills, triage and trauma skills, flexibility skills, and the ability to perform tasks in non-conventional roles are all examples of clinical skills for nurses in crisis [8].

Clinical skills are also an important component of individual crisis readiness. Clinical skills in crisis should be more precisely recorded than in traditional treatment settings. These abilities include autonomy, providing care without a physician's order, triage, quick action, employing five senses in a patient inspection without high-tech equipment, and caring for patients with varied diseases in unfavorable crisis situations [9]. Nurses' knowledge and skills for dealing with the crisis are moderate, and nurses' skills and knowledge at field hospitals are higher than those in routine hospitals. The majority of nurses learned this knowledge and expertise through simulated exercises and quasi-crisis actions [10].

The American Nurses Association (ANA) believes that all nurses are individually accountable for their acts and should practice in accordance with their code of ethics during a disaster [11]. Despite the fact that the ANA recognizes that working during disasters puts nurses in exceptional scenarios and conditions, the organization's code of ethics specifies and directs the responsibilities of all practicing nurses, regardless of situation or environment. Nonetheless, the ANA acknowledges in the 2010 draft of the scope and standards of practice that these requirements may change during times of crisis [12].

DISCUSSION:

The willingness of nurses to respond to disasters has not been thoroughly examined. Understanding nurses' desire to respond is prudent, as hospital capacity is closely tied to the number of staff nurses available to care for the surge of patients during disasters [5]. Further research is needed to validate recent study findings and clarify the needs of nurses who respond to disasters and other health emergencies because nurses are vital to disaster response operations. Current literature does not effectively identify the needs of nurses working in catastrophe circumstances, nor does it explain why nurses respond or do not respond. The influence of the nursing shortage and the identified lack of education preparing nurses for disaster response further complicates nursing's response to catastrophes, making them recommended areas for additional investigation [7].

In the absence of competent disaster management protocols, reaction and care efforts become chaotic and ineffective. The term "celebrate" refers to the act of exposing oneself to the public through the use of social media. Despite the fact that identifying disaster risks is difficult and involves significant work on the part of governments and relevant organizations, it is a fundamental and necessary step in disaster management [4,7]. The second step is preparation, which includes education and training, as well as drills and the development of plans and procedures. Caregivers, community members, and healthcare practitioners, including nurses and organizations, are among those involved [8]. The third step, catastrophe response, begins when a disaster occurs. At hospitals,

the protocols of reaction include notifying hospital personnel of a disaster, activating the disaster plan, enhancing surge capacity, accepting injured individuals and providing care, and communicating and coordinating with other agencies [9,10]. The third step is disaster recovery, which focuses on resuming normal daily routines. All healthcare providers, especially nurses who are on the front lines in such situations, must adhere to these procedures. Additionally, all hospitals must have disaster management strategies and regulations in place to ensure that disaster management is comprehensive and include all phases, not just reaction [12].

During a disaster, hospitals must admit victims and their relatives within a certain time frame. As a result, hospital administrators and decision-makers must train nurses to respond quickly and efficiently to crises. Nurses must be involved in the planning and activation of the plan, as well as educated in disaster management, including intensive training on all issues that are likely to arise before, during, and after the response, as well as drill simulations of various types of disaster scenarios (e.g., natural, eternal, external, biological, chemical, and radiological disasters) [13]. It is also critical for hospital managers and executives to grasp the disaster management challenges that healthcare providers face. Nurses perform vital and major roles in all facets of providing healthcare to patients and their families as one of the largest groups of healthcare providers. Nurses assist in disaster management by identifying and planning for hazards, participating in preparedness education and training, responding efficiently and effectively in a timely way, and participating in the recovery process alongside other disaster management teams [13]. Some research in the nursing literature tried to study the hurdles faced by nurses in disaster management, based on available evidence from published studies, but the findings were not integrated together, summarized, and analyzed as a whole. To bridge this gap, all impediments for nurses during a crisis must be explicitly understood [14].

According to the researchers, nurses are one of the largest groups of emergency responders during a catastrophe and are at risk for psychosocial disorders that may require interventions to assist them cope with disaster exposure [15]. The effects of a disaster on nurses working in the area can be daunting in the immediate aftermath, as there is a tremendous lot of turmoil and confusion that nurses must contend with and overcome [16]. According to studies, disasters generate an atmosphere of chaos and uncertainty, and nurses believe they have been or will be abandoned by leadership [16]. Feelings of desertion by management and a lack of communication play a significant influence in nurses' and other HCPs' decision-making processes when deciding to work during a crisis [17,18]. Nurses believe that catastrophe plans are developed by leaders or managers without participation from the nurses who will be working and caring for patients during and after the crisis [16,18].

Based on van Manen's "lived experience" concept, Giarratano and colleagues [15] undertook an interpretive phenomenological investigation. The study comprised 16 perinatal nurses who worked in the aftermath of Hurricane Katrina. The goal of the study was to make explicit the perinatal nurses' shared meanings of their lived experience of giving care in New Orleans during Hurricane Katrina. The study's major topics include (a) the obligation to care, (b) conflicts in duty, (c) uncertain times, (d) the strength to endure, (e) grief, (f) wrath, and (g) feeling right again. The findings revealed that nurses working during disasters must adapt to the needs that arise in both patient care and self-preservation scenarios. This study discovered that great core nursing abilities, intuitive problem solving, and a sense of staff unity are the major resources required by nurses while working during a disaster. The nurses had a wide spectrum of stress-related issues, according to the researchers. These issues included altered sleep patterns, mood swings, food disorders, substance addiction, and avoidance behaviors. Simultaneously, it was acknowledged that the nurse participants practiced in accordance with duty to care beliefs and exhibited behaviors of strength, courage, and resilience [15].

O'Boyle and colleagues [19] conducted a qualitative study using a purposive sample of 33 nurses who took part in focus groups with 2 to 9 participants in each group. The sample of nurses was gathered from 3 Midwest hospitals that were designated as receiving centers for evacuees. The study's goal was to examine nurses' opinions and concerns about working in hospitals designated as receiving locations during public health emergencies. The predominant subject that arose from the focus group interviews was abandonment. Subthemes supporting this topic included confusion, a hazardous atmosphere, a loss of freedom, and a lack of institutional commitment. Nurses said that policies were poorly thought out and that they were excluded from the communication loop. Furthermore, the nurses claimed that they did not receive any bioterrorist preparedness training [19].

According to Hughes and colleagues [16], nurses believe that they must be involved from the start of the emergency preparedness process. During an

emergency, nurses claimed that they employed their most basic abilities and teamwork to provide patient care, but acknowledged that additional education is required to improve their knowledge prior to similar crises.

According to the International Nursing Coalition for Mass Casualty Education (INCMCE), every nurse must be able to recognize the possibility of a mass casualty incident [20]. Furthermore, the INCMCE argues that every nurse must be able to recognize when a mass casualty event has occurred, protect oneself, give emergency care for people involved, and realize one's own role and limitations during such a crisis. The INCMCE further suggests that nurses understand where to go for extra educational material and how to access resources [20].

The National League for Nurses (NLN) developed educational competencies for associate degree nurses with the assistance of the National Organization of Associate Degree Nursing [21]. Although the text specifies essential competences that all associate degree nurses must satisfy, it does not expressly define the roles of associate degree nurses during emergency situations. The ability to adjust patient care to changing health care contexts is one skill that is indirectly related to disaster preparedness [21].

The common characteristic of the evaluated publications is their common setting, which was done in crisis-prone regions of the world, and their extracted results can be employed in other places. The outcomes can be debated in three stages: before, during, and after the crisis. The findings were consistent with most studies on proposed crisis nursing models and highlighted nurses' crucial role in assisting civilian victims in crisis [22].

One stage of the crisis is a preparedness that demonstrates a portion of the results that reflect nurses' duties, such as personal and professional readiness for crisis and the necessary health care actions. Crisis readiness is a critical phase that takes into account success in later stages of the crisis. Crisis readiness is defined as strategies that ensure that the resources required for an effective response are available prior to a crisis [23].

Despite the fact that health care workers are involved in disasters, nurses play an important role in delivering care in times of crisis. Because many natural catastrophes strike without notice, crisis management readiness and capacity should be improved prior to a crisis. Disaster response can be successful with crisis management readiness [24].

Another study emphasized nurses' crisis readiness and specified roles such as personal readiness, clinical skill training, and unit/group training. Nurses must be physically and mentally prepared, and they should be trained in trauma, triage, and evacuation. Also, they should be knowledgeable of the mission type, leadership, management skills, and engagement with units and the area [25].

Preparedness is essential prior to crises since, during a disaster, health care workers can aid wounded people quickly and save victims' lives in a short period of time [26]. As the first responders to a crisis, nurses must be prepared to care for the victims in order to take meaningful action. The importance of preparation in crises is vital [27]. This is consistent with theoretical stage outcomes and crisis readiness, in which nurses perform a variety of important functions.

Nurses are providing vital treatment and aid to the injured, organizing the wounded and evacuation, collaborating with other groups to give better health care, and delivering health services during the crisis. The following is a list of the people who have died as a result of their involvement in the war. Another aspect of the function is to triage and prioritize the injured, to provide health care services in crisis locations in order to preserve victims' lives, and to transport the injured and refer them to more specialist facilities [28].

In the aftermath of a disaster, nurses were responsible for preventing contagious infections, providing psychological support to the injured, administering shelters, transferring victims, rehabilitation, and reviewing disaster response on the ground. Brown et al. defined recovery as the final stage of the crisis, which might last anywhere from a few days to many years. During a substantial period, the demand for rehabilitation services rises. This stage is still ongoing for existing patients, while new services are being launched for new victims. Nurses play an important role at this period [29]. Furthermore, recovery and rehabilitation are professional services provided by nurses during and after a crisis in collaboration with other healthcare providers. Rehabilitation is a nursing competency that includes physical and psychological care for vulnerable groups, people, families, and communities. Because rehabilitation is a stage for getting up and beginning a new life, readiness, responsiveness, and recovery all complement each other in times of crisis [30].

CONCLUSION:

Nurses encounter obstacles at all stages of disaster management, including teaching, research, practical issues, and ethical and legal concerns. Disaster nursing is still considered a new profession that requires additional development, including improved education and training through the establishment of hospital curriculum and instructional activities. These activities will assist nurses in dealing with disasters competently and will improve disaster nursing practice. More disaster nursing research is also required to overcome the obstacles associated with evidence-based practice. Greater work is also required to develop guidelines for ethical and legal issues, as well as to specify the scope and functions of nurses in crisis management in order to prevent confusion. Nurses should view crisis response as a crucial job for themselves, and they should constantly be prepared to deliver health care services and stay current on the newest scientific findings in nursing. They can also play more effective roles in maintaining the environment required for the benefit of victims and the health-care system. On the other hand, nurses' involvement in crises at the three stages of readiness, reaction, and recovery are important for delivering effective treatment to victims in critical conditions and potentially saving their lives.

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