

Hospital Nurses' Encountered Challenges on Emergency and Disaster Cases

Abstract

Nurses are health care providers that plays a critical role in mitigating the impact of emergency and disasters on victims and the healthcare system. However, due to lack of training and seminar related to these areas, nurses faced challenges in implementing these competencies. This study aimed to explore the encountered challenges by nurses on emergency and disaster cases. A qualitative thematic analysis approach was used. Purposeful sampling was used to select the 12 nurses working in the hospitals in Ilocos Sur regardless of their area of designation. Data were collected through semi-structured interviews and thematic analysis technique. The inclusion criteria are nurses with at least a year of service regardless of the designated area, while other member of the health care team and without willingness to participate the study is the exclusion criteria. The study highlights the challenges faced by nurses in responding to emergency and disaster cases, including individual, environmental, and managerial factors. Nurses often lack knowledge, experience, equipment, and medicines, leading to a shortage and increased hiring of newly registered nurses. It also recommends developing disaster plans, improving hospital communication and referral systems, and updating policies and procedures related to disaster nursing to ensure ethical and conflict-free work.

Keyword: *hospital nurses', challenges, emergency and disaster cases.*

Introduction

Nurses are employed in caring patients suffering from life-threatening conditions and various challenges influence their ability to provide high-quality care. Emergency and disaster cases must be attended by nurses skillfully and confidently competent.

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Emergency nurses are expected to provide required nursing services by using their professional expertise to reduce the risk posed by disasters. Thus, emergency nurses' disaster nursing core competencies are essential for coping with disasters, Park and Kim, (2017). However, due to occupational burnout and stress are considered important challenges facing nurses working in the emergency department. A previous study about emergency nurses' burnout during the outbreak of the Middle East Respiratory Syndrome Coronavirus (MERS-CoV) found relatively high levels of burnout and stress among ED nurses, Patrick and Adam et. Al, (2018). Additionally, according to the World Health Organization and the International Council of Nurses, they are considered the largest group of health care practitioners, need to develop competencies in disaster response and recovery, but training is often fragmented or not available, Grochtdreis, (2020). Therefore, nurses need continuous and ongoing development of their skills and competencies for disaster risk management to maintain quality nursing activities before, during, and after disasters.

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This study aimed to explore the challenges of nurses on emergency and disaster cases. The lack of necessary competencies and preparation of nurses for disaster risk management can increase the adverse consequences of disasters because competent nurses are essential for both the healthcare system and the society. The result of this study could be helpful and to be integrated into the educational curricula to prepare new nurses to deal with these challenges in the future and contribute to finding solutions and solving some significant problems facing registered nurses of any areas. The hospital administrators and the nurses' organization should develop effective interventions to overcome the challenges facing nurses to ensure a better work environment and high-quality patient care.

Methodology

Research Design

A qualitative thematic analysis approach was used in this study. Purposeful sampling was used to select the 12 nurses working in the hospitals of Ilocos Sur regardless of their area of designation. Data were collected through semi-structured interviews and thematic analysis technique was used to analyze data using the husserl's

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method in explaining the responses of the participants. Data saturation was reached at the twelfth participant.

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Participants of the Study

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Of the 12 nurses participating in the study, 8 were female nurses, 4 male nurses, majority of the participants are single and a bachelor's degree holder. The job position of the participants includes 8 nursing staff, 2 supervisors, and 2 head nurses. Their age range was 24–42 years and their average work experience was 5 years. The inclusion criteria are nurses with at least a year of service regardless of the designated area, while other member of the health care team and without willingness to participate the study is the exclusion criteria.

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Data Analysis

In this study, the gathered data through recording was transcribed and written down, analyzed with observation notes after each interview. Then the obtained data from the participants were separated into a significant statement and was coded. There were identified themes with sub-themes.

Ethical Consideration. The study has been reviewed and it was approved by the St. Paul University Philippines Review Ethical Committee with the code SPUP_2024_0248_SRJL for implementation. After incorporating comments and suggestions, the study was conducted with the participants and with their signed informed consent.

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Rigor of the Study. The researcher established a trusted relationship with the participants after giving a comprehensive discussion on what to expect on to the study to ensure the credibility through discussion among other researchers considered as expert in the study.

Results and Discussion

The following are the questions that were asked to the participants during the interview:

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1. What is/are the challenges or problems encountered during emergency situation?

Theme: Service and Environment Challenges

Nurses identified service and environment challenges as the main theme in emergency management, focusing on nurses' performance and factors fostering a conducive environment for procedures.

A. Manpower to deliver care and services

According to the participants, the lack of information and uncertainty regarding how to treat and care for patients, unexpected situations, the confusion of the work environment, the chaos and crowding, and the presence of contradictory information about how to provide care during disasters, resulted in feelings of confusion and worry.

Nurses described these conditions as chaotic scenes during disasters, which made it difficult for them to make correct decisions and provide quality care. So, they may provide care and treatments with doubt and uncertainty regarding their effectiveness. The following are the nurses' responses:

"There's a nurse on duty however, no experience and knowledge in doing CPR". P1

"There are adequate nurses in the morning shift however, inadequate during at the night shift". P2

"Understaffed nurses on duty during emergency cases" P4

"Adequate nurses, however, they are new to the procedure". P9

"We have a shortage of nurses since last year, so we need to hire again nurses in giving quality care to patients". P11

"We have limited training and seminar related to emergency and disaster management, and since there is no support and assistance so we don't go for training even though it is important." P12

Therefore, it must be considered adequate staffing to deliver effective emergency care and reduces work stress. Additionally, support system is needed for our nurses to undergo seminar and training to increased their knowledge and enhance their skills in attending the emergency cases.

According to the study of Afaya, et. al, 2021, due to the shortage of nursing staff, limited specialty training, and stressful working environments are the identified problems during emergency. Furthermore, lack of continuing professional education was seen to be endangering the future of emergency nursing practice in the hospital. In the same study, it was included that imperative to increase the skilled nursing workforce and providing specialty emergency nursing training for nurses.

Additionally, Bell, 2015 study, included for the increased attention to trauma and emergency care, but the health sector in Ghana currently has limited training institutions for these areas, resulting in delays in emergency care, and associated with poor clinical outcomes. Furthermore, Lastly, due to the shortage of nursing staff, limited specialty training, overwhelming patient numbers, and stressful working environments, the emergency nursing role especially in Africa is particularly challenging, Bergman et. al, (2008).

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B. Managing patient's family members' emotion

Nurses had included the concerns about the family members' emotions during emergency situation. Participants' identified challenges due to as pressure increases the emotion of the family member's increases. The following are the statement of the participants:

P11. "The patient's significant others act aggressively while performing the procedure".

P12. "The emotions by the patients significant other give pressure on me while doing the CPR".

Nurses face emotional and psychological challenges when working in tense situations during emergency. These challenges can manifest as anger, sadness, anxiety, mood disorders, and fear. Nurses who experienced these negative emotions were more likely to have conflicts with their colleagues, managers, and companions. These findings suggest that nurses may lack the necessary skills to control their emotions in difficult situations such as disasters.

C. Pressure under the supervision

Nurses were concerned about the pressure under supervision of their managers specially during disaster. These observation increases the pressure and will not help the nurses in providing quality care rather, it will only increase their anxiety and stress leading to poor competency. Some of the nurses' responses are:

"Instead working with confidence, sometimes, doctors and supervisors give us additional pressure during the scene leading to performing incompetently". P3

"Strict doctors and even shouting to us during emergency cases". P6

"Simple mistakes turned in to an issue" P7

"Instead of giving us comment that will boost our confidence they give us more pressure in dealing our mistakes" P8

These issues identified such as the emotional instability, and lack of information and pressure under supervision placed into an anxiety and stress among nurses during the performance of the procedure. Furthermore, nurses under pressure and stress, the competency may be altered regardless they are knowledgeable or not.

In the study of Andruszkiewicz, (2018), that nursing requires constant focusing of attention, rapid responses, decision-making and the ability to perform many activities simultaneously, often under time pressure. Moreover, in the study of Demerouti et. al., (2001), negative outcomes when excessive tension and pressure on individuals. Conversely, job resources, including organizational and social factors,

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can help employees balance job demands and resources, enhancing well-being and motivation. However, imbalances can lead to burnout, reduced focus, and higher absenteeism. Furthermore, a supportive work environment helps individuals cope with stress in customer-oriented jobs, allowing the organization to display expected emotions and reduce emotional labor (Grandey, (2000); Grandey et al., (2004).

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Theme: Medical supplies

A. Unavailability of equipment and medicines

Majority of the participants presented the shortage of facilities, equipment and even medicines. These challenge increases the possibility of having infections when dealing directly with patients without taking precautionary measures.

"In cases like fracture, there's no apparatus and equipment in our hospital to stabilize the body of our patient". P3

"Our hospital is under level 1 category, which is sometimes, we don't have appropriate equipment in some cases, also medicines". So what we do is letting our patients relatives to buy the medicines and equipment in the nearest medical supply"
P6

"During covid-19 influx of patients admitted, we don't have enough materials and extra room to cater and appropriate care to them". P12

It is reflected on the responses of the participants that the unavailability of equipment and medicines during emergency is one of the challenges they are encountering. It is crucial for organizations and governments to address this issue in order to ensure the safety and well-being of all individuals during emergencies.

This was supported with the study of Moyimane, 2017, that, shortage of medical equipment, either due to unavailability or non-functioning, is a barrier to the ability of the health system to deliver quality health services. The World Health Organization estimates that between 50 to 80 percent of medical equipment in developing countries is not functioning and those countries lack technology

assessment systems and regulatory controls to prevent importation of inferior medical equipment.

Additionally, in the same study, it was mentioned that nurses related their dissatisfaction about the unavailability of basic diagnostic, resuscitation and monitoring equipment. Moreover, in the study by Hines, Frazee and Stocks, 2011, also found that emergency department nurses were confronted with several challenges which included inadequate resources to work with due to decreased reimbursement by insurers, and they expressed dissatisfaction when they lack adequate resources to work with. Lastly, Afaya, 2015, most nurses working in the emergency department were left in a state of frustration as the most vital equipment needed to manage critical cases were either broken down or unavailable.

This implies that the consequences of the critical shortages of both medical equipment and medicines may impact the delivery of quality care in cases of emergency. These challenges affected the service delivery negatively leading to serious consequences to the image of the hospital and the nursing profession. Additionally, this may prolong procedures for referral of patients, unfair treatment of patients and substandard nursing care.

Theme: *Ineffective responders*

The nurses' ability to respond effectively in emergency situation and their ability to perform a clinical decision judgment was unanimously emphasized by the participants. Through experience and skills enhancement will improve the ability of nurses in performing emergency procedure.

A. Newly hired and inexperienced nurses

The presence of obstacles such as the inexperienced nurses to respond in emergency may give interruption in providing quality care service. This is important especially to the team and collaborate within the profession. Additionally, one of the major concerns of nurses in emergency and disaster cases was the lack of medicine and equipment, which could compromise the quality of care provided to patients. This could be a significant source of stress for nurses, who might feel unable to provide the level of care they would like to.

"We are clueless what to do due to none knowledgeable on the procedures related to emergency". P5

"When the nurses in the ER called for code BLUE, we need to go down to assist our co-staff for possible CPR and others". P6

"it's my 2nd year in service on this hospital, even though I have BLS and ACLS training, I am not confident in performing such emergency cases such doing CPR". P9

"During my first years in the hospital, even I am knowledgeable on the procedure during emergency, sometimes I am not confident and competent in doing so". P11

Nurses reported the least participants and attendees in such emergency and disaster related training. Additionally, newly hired nurses are not even trained in emergency and disaster related. These could lead to inability to perform accurately and competently the competencies during emergency and disaster management.

As discussed in the study of Farokhzadian, 2024, nurses emphasized the importance of adhering to disaster risk management guidelines and ensuring that care was provided uniformly, despite of scares resources available. Additionally, it was mentioned that these lack of resources and equipment can have serious consequences, with some high-risk patients not receiving the care they need to survive. Furthermore, in the study of Atakro, 2018, conducted on the experiences of registered nurses in the emergency centres in the Volta region of Ghana identified some challenges confronting nurses working in emergency department. They found that resource challenges such as lack of space and inadequate emergency specialists endangers quality emergency care

Therefore, nurses may lack motivation to participate in training courses due to the lack of immediate and routine application of the training. Additionally, lack of support and finances to help nurses in attending training are the identified factors in not engaging for new knowledge to be equipped and skilled emergency nurses.

2. What are the challenges or problems encountered during disaster situation?

Disaster risk management is a process of organizing and directing resources to cope with a disaster, coordinating the roles and responsibilities of responders and to minimize the impact of disaster. During disasters, nurses must communicate with healthcare team members, clients, and their families. As a result, effective communication becomes more complex and challenging. Nurses may struggle with choosing the right words and phrases to provide information, empathizing with clients, and gaining their trust in disaster conditions. Challenges have been identified by nurses as follows:

Theme: Communication Skills

A. Presence of obstacles to teamwork

Nurses were concerned about their interactions with the companions of injured patients during disasters. Confusion, emotional instability, misplaced expectations, and lack of information about the current conditions caused companions to have an inaccurate understanding of the situation. These issues can disrupt the provision of care, waste time, and increase nurses' stress levels. As a result, the communication between nurses, patients, and their companions became distorted, making it difficult for nurses to manage interactions.

"The referral system in our unit is delay due to there's a need to be coordinated first to central unit prior in transferring the patient". P2

"The triage system was not followed due to the influx of patients" P3

"Not competent nurses to communicate with other staff and hospitals". P7

"Since I am newly hired nurse for 2 years now, I don't have any idea to communicate with the others". P8

In the responses of the participants, it shows how they communicate in the team and performing referral system. Nurses emphasized the essence of their competence and preparation in responding to disasters safely and effectively, particularly in rescuing and caring for the injured. In the study of Farokhzadian, et. al. 2024, that identified the lack of continuous training as the most significant reason for failure to learn skills and acquire disaster risk management competencies.

Furthermore, these challenges had a significant negative impact on nurses' practices during disasters.

Therefore, the lack of time and emotional imbalances can lead to inappropriate interactions with the healthcare team, clients, and their companions. Managing interactions becomes a difficult and stressful task. Additionally, experienced nurses can rely on their extensive knowledge to manage interactions and serve as supporters for other nurses.

Theme: Insufficient ability of nurses to respond to disaster

A. Lack of training related to disaster

During a disaster, hospitals receive victims and their families within a very specific period of time. Nurses are expected to perform effectively during disaster management, this is crucial in such cases. To be able to confidently perform, there must be an enhancement on knowledge and skills. However, sometimes, only the theoretical knowledge of disaster preparedness skills not the application of this knowledge to practical training, and the lack of training could lead to poor delivery of service. Therefore, hospital managers and decision-makers must prepare nurses to be ready to respond rapidly and effectively to disasters. Below are the responses of the participants:

R4. "Training on disaster management among nurses are limited and or nothing at all prior to the event".

R7. "The basic life support specifically in doing CPR, not correct in performing due to no update of training".

R10: "The recent episodes of earthquake, I was attacked by "panic" that I don't even know what to do if to run for my life or secure the safety of our patients".

R12. "I was not aware of where the disaster and emergency plan of our hospital leading to failure in executing the safe and proper assistance of the patient".

Nurses identified the lack of continuous training as the most significant reason for failure to learn skills and acquire disaster risk management competence. These challenges had a significant negative impact on nurses' practices during

disasters. Also, with the study of Harthi., et. Al, 2020, it is very important for hospital managers and leaders to understand the disaster management barriers faced by healthcare providers. As one of the largest groups of healthcare providers, nurses play critical and significant roles in all aspects of providing healthcare to patients and their families.

Limitations of the Study

Participants that were included are from hospitals of the province that caters admission or in-patient. the participants asked the researcher not to reveal to their administrators their responses and afraid of getting reactions from their management, despite of thorough explanation that all data gathered will be secured and treated with utmost confidentiality.

Conclusion

The study finds out numerous challenges faced by nurses in responding emergency and disaster cases, which includes individual, environmental and managerial factors. These factors are crucial in performing emergency and disaster management competently and confidently. It is important to the administrators and policy makers to address concerns related to the challenges of nurses during emergency and disaster management in order for them to deliver a quality care to patients. Majority of the nurses are not confident in performing competency towards emergency due to lack of knowledge and experience. Additionally, the lack of equipment and medicines during emergency cases are one of a major concern of nurses' aside from not being knowledgeable in the procedures.

Moreover, with the continuous exit of staff nurses in the hospital causing a shortage in the organization leads to an increase of hiring a newly registered nurse. Lastly, nurses are not competent enough in performing disaster management due to the fact that they are lack on training.

Recommendation

Based on the findings of the study, to address these challenges enumerated, it is recommended that (1) managers establish positive relationships with nurses

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based on respect, understanding, and support. Ensuring the availability of training and educational activities that enhance nurses' knowledge and skills to respond effectively and with more confidence and competence, (2) Plans should be developed to improve academic and continuous training, taking into account the needs and appropriate facilities and equipment, and training should be more practical. (3) Additionally, nursing leaders, healthcare policymakers and governments should use these findings to better support the nursing workforce in disasters. Therefore, it is recommended that all hospitals develop disaster plans that address surge capacity in terms of staffing and resources, communication and safety support. (4) Improve the hospital and communication / referral system to ensure that nurse can work effectively within the healthcare system with no confusion due to poor system and poor coordination between the organizations involved in the disaster response aside from having a competent and experienced nurses in performing the task. (5) Improve the policies and procedures related to disaster nursing to ensure that nurses have no conflict issues, including ethical issues. It is recommended that experts in the nursing field ensure that policies and procedures are updated and are familiar to all nurses.

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References:

Afaya A, Bam V, Azongo TB, Afaya RA, Yakong VN, Kpodo GK, Kaba RA, Zinle DAN, Tayuu DK, Asantewaa S, Adatara P. "We are left with nothing to work with"; challenges of nurses working in the emergency unit at a secondary referral hospital: A descriptive qualitative study. *PLoS One*. 2021 Feb 18;16(2):e0247062. doi: 10.1371/journal.pone.0247062. PMID: 33600464; PMCID: PMC7891734.

Al Harthi, Manal, Al Thobaity, Abdullellah, Al Ahmari, Waleed and ALmaki, Mohammed. 2020. Challenges for Nurses in Disaster Management: A Scoping Review *Risk Manag Healthc Policy*. 2020; 13: 2627–2634. Published online 2020 Nov 16. doi: 10.2147/RMHP.S279513

Al-Ghabeesh, Suhair Hussni., Thabet, Asmaa., Rayan, Ahmad and Abu-Snieneh, Hana Mohammad., 2023. Qualitative study of challenges facing emergency departments nurses in Jordan. Published online 2023 Mar 2. doi: 10.1016/j.heliyon.2023.e14141

Atakro CA, Gross J, Sarpong T, Armah E, Akuoko CP. Qualitative inquiry into Registered General Nurses' experiences in the emergency centre. *African Journal of Emergency Medicine*. 2018; 8(1):16–20. 10.1016/j.afjem.2017.08.007

Bell SA, Bam V, Acheampong E. 2015. Developments in emergency nursing education in Ghana. *Emergency Nurse*. 2015;23(8). 10.7748/en.23.8.18.s24

Bergman S, Deckelbaum D, Lett R, Haas B, Demyttenaere S, Munthali V, et al. Assessing the impact of the trauma team training program in Tanzania. *Journal of Trauma and Acute Care Surgery*. 2008;65(4):879–83. 10.1097/TA.0b013e318184a9fe

Farokhzadian, J., Mangolian Shahrabaki, P., Farahmandnia, H. et al. (2024). Nurses' challenges for disaster response: a qualitative study. *BMC Emerg Med* 24, 1. <https://doi.org/10.1186/s12873-023-00921-8>

Grochtdreis, Thomas., Schröder-Bäck, Peter., Harenberg, Niels, Gorres, Stefan and de Jong, Nynke. 2020 National disaster preparedness and emergency response of nurses in Ger-many: An exploratory qualitative study. Original Research. *SEEJPH* 2020, posted: 26, November 2020. DOI: 104119/seejph-3972.

Hines A, Frazee T, Stocks C. 2011. Emergency department visits in rural and non-rural community hospitals Rockville: Agency for Healthcare Research and Quality.

Moyimane, Merriam Bantile., Matlala, Sogo France., and Kekana, Mokoko Percy. 2017. Experiences of nurses on the critical shortage of medical equipment at a rural district hospital in South Africa: a qualitative study. *Pan Afr Med J*. 2017; 28: 100. Published online 2017 Sep 29. doi: 10.11604/pamj.2017.28.100.11641

Patrick R.M., Malone A., Adam Denney A., et al. Job stress, burnout, job satisfaction, and turnover intention among student affairs professionals. *Coll. Student Aff. J.* 2018;36(1):94–108. doi: 10.1353/csaj.2018.0006.

Park, Hye-Young, Kim, Ji-Soo 2017. Factors influencing disaster nursing core competencies of emergency nurses. *Applied Nursing Research*. Vol. 37, October 2017. Page 1-5. <https://doi.org/10.1016/j.apnr.2017.06.004>

Rehman J, et al. 2019. Applying systems thinking to flood disaster management for a sustainable development. *Int J Disaster Risk Reduct.* 2019;36:101101.

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