

THE PERCEIVED LEVEL OF DISASTER PREPAREDNESS COMPETENCY AMONG NURSES ON STAGES OF PREVENTION, MITIGATION, PREPAREDNESS, RESPONSE, RECOVERY, AND INNOVATION

* Jennifer C. Carulla

** Whindie D. Clemente

*** Jacqueline Mae C. Gabiana

**** Lorena T. Castillo

***** Jocelyn C. Tebrero

***** Jennie Jasmin D. Francisco

***** Elenor C. Santos

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Corresponding Author: Jennifer C. Carulla; Email: jccarulla@fatima.edu.ph; doi:10.46360/cosmos.et.620241003

Abstract

Background: Disasters pose serious difficulties to healthcare systems around the world, thus medical personnel must respond quickly and preparedly. Nurses are among the professionals who play a vital part in disaster preparedness and response. They are frequently on the front lines of providing healthcare during such incidents.

Methods: the research applied the descriptive methodology in the study, whereby the subject variables were intentionally measured and analyzed quantitatively, utilizing a self-formulated questionnaire.

Result: To help patients, the community, and society at large, nurses must be informed and have the skills necessary to practice various drills as an homage in the prevention stage.

Conclusion: Better patient outcomes are achieved, a resilient healthcare system is supported, and the healthcare industry as a whole is better equipped to withstand and recover from natural disasters.

Keywords: Prevention, Mitigation, Recovery, Innovation, Competency.

Introduction

Numerous investigations have been carried out to explore the viewpoints of nurses concerning the utilization of Evidence-Based Practice in emergency readiness endeavors. Research has shown that implementing EBP is positively connected with one's attitude towards it (Alruwaili & Alharbi, 2021; Al Thobaity & Alshammari, 2019; Ghodraty et al., 2018). The results of Alruwaili and Alharbi (2021) showed that nurses were more likely to use evidence-based practices in emergency preparedness if they had a positive attitude towards EBP. Parallel to this, Al Thobaity and Alshammari (2019) found that the adoption of evidence-based practices in emergency preparedness was higher among registered nurses with a positive attitude towards EBP.

These results suggest that interventions aimed at enhancing nurses' attitudes towards evidence-based practice (EBP) may enhance the application of EBP in disaster preparedness. The literature on this subject has revealed a number of challenges that

need to be addressed before Emergency Behaviour Planning (EBP) is included in emergency planning. These barriers include, but are not limited to, a lack of resources, inadequate education and training, time constraints, and an organisational culture that inhibits creativity (Al Thobaity & Alshammari, 2019; Alruwaili & Alharbi, 2021; Djalali et al., 2021; Ghodraty et al., 2018; Park et al., 2018).

The results of a study conducted by Alruwaili and Alharbi (2021) indicate that not enough resources are the main barrier to the application of EBP in disaster preparedness.

When it comes to implementing evidence-based practices, registered nurses' perceived understanding of EBP in emergency preparation plays a significant role. Research has indicated that nurses lack adequate knowledge of evidence-based practice when it comes to preparing for disasters (Al Thobaity & Alshammari, 2019; Alruwaili & Alharbi, 2021; Djalali et al., 2021).

*_*****Our Lady of Fatima University, College of Nursing, Valenzuela City Campus, Philippines.

The results of a study conducted by Al Thobaity and Alshammari (2019) showed that 71.6% of the nurses did not have sufficient knowledge of EBP about disaster preparedness. Similarly, Alruwaili and Alharbi (2021) found that eighty percent of nurses did not understand EBP well enough for disaster preparedness. These results suggest that training and educational initiatives are necessary to enhance nurses' comprehension of evidence-based practice in emergency preparedness.

Methodology

Research Design

To assess and evaluate the perceived level of disaster preparedness competency among nurses on prevention, mitigation, preparedness, response, recovery, and innovation stage, the research applied the descriptive methodology in the study, whereby the subject variables were intentionally measured and analyzed quantitatively.

Respondents of the Study

The study's respondents were registered nurses who had experience working in a tertiary hospital's ER, ICU, OR, inpatients, OPD, and nursing administration under the Nursing Services Department. They willingly responded to a series of typical questions in the survey and had at least a year of experience as nurses. The hospital used to have 500 beds and offered therapeutic and diagnostic services for medical, surgical, trauma, and critical care cases involving both adults and children.

Instruments of the Study

An expert has validated the self-structured questionnaires in the survey after undergoing content validation. The outcome demonstrated that the modified-structured questionnaire is appropriate and will be approved for use as a research instrument. Additionally, a reliability test employing the internal consistency technique is performed on the research instrument. A test's internal consistency evaluates the relationship between several items meant to measure the same concept (Middleton, 2022).

Results

Prevention Stage

Inadequate research and statistical skills and knowledge, which are critical for applying evidence-based practice, particularly at the preventative stage (Shayan et al., 2019; Abdulwadud et al., 2019; Lizarondo et al., 2019). To help patients, the community, and society at large, nurses must be informed and have the skills necessary to have practiced various drills as an homage in the prevention stage. In 2021, Chau et al.'s research found that it benefits nurses in a wide range of contexts and situations. It is true that certain nurses need to be present in this section and aware of the

current catastrophe affecting their place of employment. To identify priority areas where EBP implementation can be improved and have a positive impact, it is imperative to develop strategies and programs that are able to conduct a systematic evaluation of barriers or facilitators (Kaseka & Mbakaya, 2022; Chiwaula & Jere, 2022; Sanchez-Garcia et al., 2019, Harvey et al., 2019, Oh & Yang, 2019). A few of the participants acknowledged that their hospital possessed adequate equipment and that the nurses had acquired multiple inventive techniques for handling emergency situations. Shaukat, Ali, and Razzak (2020) claim that because nurses are significantly more likely to experience unanticipated crisis situations, they need to be informed and ready for anything.

Mitigation Stage

Clarke et al. (2021) found that advantages are demonstrated and understood in collaborative practice, and that these factors are all emphasised as variables in EBP. To benefit the patient, the community, and society at large, nurses must be knowledgeable and exhibit qualities of a tribute. Finding and being willing to learn about EBP is a step in the mitigation approach. As per Chau et al. (2021), it is advantageous for nurses in a wide range of contexts and situations. The results of Clarke et al. (2021) indicate that well-trained health professionals will undoubtedly assist the population during emergencies and disasters. To identify priority areas where EBP implementation can be enhanced and have a good effect, it is imperative to design strategies and programmes under the workshops and seminars that are capable of conducting a systematic review of barriers or facilitators (Kaseka & Mbakaya, 2022).

A few of the participants have acquired knowledge and expertise in various inventive methods for handling emergency situations. Shaukat, Ali, and Razzak (2020) claim that because nurses are far more likely to experience unanticipated crisis situations, they need to be informed and ready for them. A few respondents concurred, stating that the majority of them are familiar with and comfortable with their understanding of disaster preparedness in their line of work. Although nurses are eager to accept the EBP, they must be provided with the knowledge and skills required to integrate the EBP in order to enhance their capacity and competence to do so (Chiwaula & Jere, 2022).

Nurses are willing to adopt the EBP. Consequently, nurses will be able to enhance their competence and proficiency in implementing the EBP. When it comes to competing with other medical professionals in the provision of disaster preparedness services, the overwhelming majority of respondents believed that nurses needed to

possess adequate information. Furthermore, it is imperative that the nurses possess a solid understanding of evidence-based practice about emergency preparedness. Furthermore, the hospital's administration plays a crucial part in securing the implementation of evidence-based practice (EBP) (Abu-Baker et al., 2021; Lehane et al., 2018). In order to overcome the obstacles to the implementation of EBP, Alqahtani et al. (2022) strongly suggest nursing administrators to assist and involve the nurses working under their supervision in the formulation and execution of educational interventions and activities.

Preparedness

In order to respond swiftly to an emergency, hospital preparation is essential, according to Clarke et al. (2021), and this falls under EBP. Chau et al. (2021) state that socializing in a variety of contexts and situations is beneficial for nurses. Issues with cooperative preparation are specifically highlighted as factors impeding the adoption of EBP, according to Clarke et al., (2021). Creating plans for disaster preparedness is crucial, as is being methodically ready as an institution and as nurses (Chiwaula & Jere, 2022).

A few of the participants have gained knowledge on various approaches to instruct patients on being ready for unexpected circumstances. As stated by Razzak, Shaukat, and Ali (2020).

Response

The conclusions of Clarke et al. (2021) indicate that confidence, which is consistent with practice and understanding, is the key to responding appropriately in an emergency. To help the patient, the community, and society at large, the institutions must be informed and exhibit the qualities of a good hospital. As to Chau et al. (2021), hospitals benefit from having specialized responses ready for a wide range of situations and circumstances. When it comes to responding to emergencies, team roles are stressed as variables in every organization, according to Razzak (2021).

Every institution must have a team approach to disaster response, and all healthcare professionals must participate and cooperate (Chiwaula & Jere, 2022).

Certain hospitals have acquired multiple techniques to react promptly in any emergency. Hospital staff, especially the nurses, need to be informed and ready for catastrophe situations since hospitals are far more exposed to them than in the past (Shakat, Ali, & Razzak, 2020).

According to the findings of a 2020 study conducted by Al Harthi and colleagues, hospital leaders and

decision-makers bear the responsibility of ensuring that nurses are ready to react promptly and efficiently in the case of a natural disaster. But according to Al Harthi et al. (2021), a lack of catastrophe preparation on the part of healthcare professionals and health organisations is one of the reasons for inadequate and chaotic crisis management as well as the response of health workers. Healthcare organisations and individual healthcare professionals may both exhibit this lack of preparedness.

Recovery Stage

Clarke (2021) asserts that rapport-building skills are critical to providing and delivering high-quality service. Involving patients or clients in the recovery services that nurses provide is crucial. The entire community and society must be included by the nurses as well. The results of Clarke et al.'s study from 2021 indicate that nurse-patient relationships are crucial to providing high-quality care. In order to improve and positively impact EBP implementation, it is imperative to create methods and learning patterns that patients or clients can comprehend (Sanchez-Garcia et al., 2019).

A few of the participants have acquired many methods of communicating with clients. As stated by Razzak, Shaukat, and Ali (2020). Understanding the programme on disaster preparedness requires the patient's understanding (Chiwaula & Jere, 2022). Nurses will be better equipped to carry out the EBP as a result of this. The nursing community is now in a position to accept evidence-based practice. This will be a good development since it would give registered nurses the chance to increase their capacity and capability to implement the EBP.

The overwhelming majority of respondents believed that nurses must possess the necessary knowledge in order to be prepared for disasters and to be competitive with other medical professionals when it comes to providing services related to disaster preparation. Comprehending the obstacles encountered by nurses at every phase of disaster management can enhance nurses' consciousness, aid in the creation of fresh strategies and protocols, and facilitate the molding of nursing reactions to calamities.

It will also enable nurses to respond to any type of crisis quickly and effectively, and it will help enhance disaster management preparedness measures such education, training, planning, and management (Al Harthi, 2020). Hospitals have sufficient resources at their disposal, but in order to improve nurses' emergency readiness, hospital staff members must receive proper training, safety protocols must be strengthened, and holistic

management must be implemented (Alruwaili et al., 2021).

Innovation

The results of Clarke et al. (2021) indicate that problems with colleagues' collaborative practices are specifically highlighted as a factor impeding the adoption of EBP. Hospital nurses must be informed and always looking for new ways to better assist patients, the community, and society as a whole. Chau et al. (2021) state that while change is inevitable and only ever constant, it is beneficial for nurses to be ready for any emergency circumstance in a variety of settings and scenarios. The results of Clarke's (2021) study indicate that in order to generate novel and improved ideas, problems with collaboration practices related to briefing about catastrophe preparedness and idea brainstorming must exist.

To implement and have an innovative positive effect, it is imperative to develop and disseminate EBP methods and programmes (Harvey et al., 2019).

A few of the participants have acquired multiple approaches to discuss creative solutions during calamities. Shaukat, Ali, and Razzak (2020) claim that because nurses are far more likely to experience unanticipated crisis situations, they need to be informed and ready for them. The nursing community is now able to accept evidence-based practice.

This will be a good development since it would give registered nurses the chance to increase their capacity and capability to implement the EBP. The reason for this, according to research by Al Harthi et al. (2020), is that the rules and principles governing disaster nursing have not been fully developed globally. The nurses noted that staff members have demonstrated a desire to expand their capacities in regard to the usage of EBP, according to Mallory et al.'s 2020 research. However, a number of studies (Said & Chiang, 2020) that employed rigorous research approaches to analyse the data revealed that nurses lack the necessary tools to deal with natural disasters.

Conclusion

By implementing this framework for a creative program, hospitals may foster a culture of evidence-based practice among their nursing staff when it comes to disaster readiness. Thus, better patient outcomes are achieved, a resilient healthcare system is supported, and the healthcare industry as a whole is better equipped to withstand and recover from

natural disasters. This framework provides hospitals with a solid foundation upon which to establish and sustain effective disaster preparedness initiatives. With the number of catastrophes increasing, it is more important than ever to adopt evidence-based approaches, and this framework provides a strong basis for doing so.

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Conflicts of Interest

The authors declare there are no significant competing financial, professional, or personal interests that might have influenced the performance or presentation of the work described in this manuscript.

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