

Nurses' Roles, Disaster Preparedness and Management among Elderly during Pandemic

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Abstract – Multitudinous disasters have crippled the country, leaving severe casualties and abundant challenges among many citizens, especially among the vulnerable groups of elderly, who pose increasingly physiological and immunological deficiencies in dealing with disasters, particularly amidst the pandemic. As healthcare professionals, nurses carry crucial responsibilities in providing assistance and management among them to help alleviate their suffering and distress from these circumstances. This quantitative, descriptive-correlational study aims to determine the nurses' roles among elderly during pandemic, the nurses' disaster preparedness among elderly during pandemic, the nurses' disaster management among elderly during pandemic, the challenges among nurses in taking care of elderly during pandemic, and the significant relationship between nurses' disaster preparedness, nurses' disaster management and challenges among nurses in taking care of elderly during pandemic. 170 public health nurses working on municipalities within the 30-km radius around Taal volcano were purposively selected and surveyed via Google forms. Gathered findings revealed that during pandemic, nurses always fulfill their roles in rendering essential health care among the elderly; however, they often experience challenges in taking care of them. Furthermore, they often perform measures for boosting their disaster preparedness and management among this group without being correlated by the challenges they encounter. This study concludes that nurses still require continuous enhancement of their disaster preparedness and management among elderly during pandemic thus, further provision of high standard training programs directing to this is recommended for the supplementary sustainment of the elderly's significant health care needs fundamental in upholding their well-being.

Keywords – Disaster management, disaster preparedness, elderly, nurses' roles, pandemic

INTRODUCTION

Numerous disasters have disrupted and destroyed the conditions of the individuals, communities, infrastructures, services, and environment across the world, leaving them a level of suffering which can exceed their capacity of adjustment. The arrival of disasters is an inevitable situation as it is a naturally occurring phenomenon. Hence, adequate preparation and management are needed to prevent further damage and distress for all susceptible to its occurrence. Among the population, elderlies are considered a huge part of the vulnerable groups who have insufficient capacity to protect themselves against these challenging circumstances because of their experienced changes in cognitive, sensory, and functional capabilities. In fact, it was found out that people over the age of 65 are more likely to suffer casualties during natural catastrophes than younger individuals [1].

Within the duration of the COVID-19 pandemic, various disasters have hit the Philippines, leaving severe casualties to many citizens, especially among the vulnerable elderlies. Thus, significant assistance is integral to preclude their further suffering from these events. Since Florence Nightingale demonstrated the critical role of nurses in disaster and emergency response, nurses should therefore take part in serving this susceptible group compassionately and skillfully, even amid disasters, when considering their special health care needs while strictly adhering with the precautionary measures and protocols during these times of COVID-19 pandemic.

Disaster preparedness will be a tool for nurses to further train themselves in addressing the health problems brought about by disasters. Hence, more programs and facilities for training are needed, for them to hone diverse skills and resourcefulness in crucial situations. As part of their disaster

management, nurses must present these competency skills to produce efficacious results in providing care for the expanding aging population. However, numerous studies revealed that nurses have a low level of disaster preparedness and management. Also, there is only limited literature and research available about this concept that focuses on the elderly population, more so during pandemic.

This study intends to explore this relevant concept to identify and bridge the existing gaps within this problem and formulate appropriate recommendations for the improvement and enhancement of disaster response that will benefit both elderly groups as the recipient of service and the nursing population as one of the primary responders in the prevalence of disasters while adhering to safety and preventive measures during COVID-19 pandemic.

OBJECTIVES OF THE STUDY

This study aims to investigate the nurses' roles, disaster preparedness and management among elderly during pandemic. Specifically, this study intends to determine the nurses' roles among elderly during pandemic, the nurses' disaster preparedness among elderly during pandemic, the nurses' disaster management among elderly during pandemic, the challenges among nurses in taking care of elderly during pandemic, and the significant relationship between nurses' disaster preparedness, nurses' disaster management, and challenges among nurses in taking care of elderly during pandemic.

MATERIALS AND METHODS

Research Design

To achieve the objectives of the study, the descriptive-correlational research design was utilized. This type of non-experimental quantitative research method enables the description and elaboration of the nature of a particular phenomenon while measuring and analyzing the statistical connection between the presented variables without the impact of any extraneous variable [2]. Since this study targets to determine the significant relationship between nurses' disaster preparedness, nurses' disaster management, and challenges among nurses in taking care of elderly during pandemic, employing the descriptive correlational design was functional in discovering the characteristics, and extent of the relationship of a demographic segment through statistical data [3].

Participants

A non-probability sampling method, purposive sampling, was employed to focus on the qualities of the target population. With this sampling technique, three criteria were used including: (1) Public Health Nurse; (2) been in that position for at least one year; and (3) have interaction with the elderly in the community. The researchers aimed to get the highest possible number of qualified people with all these mentioned criteria.

A total of 170 public health nurses ages 23 to 45 years old without any health-related condition answered the online survey questionnaire. For the research locale, the municipalities within a 30-km radius of Taal Volcano were selected to be the source of the prospective respondents. This included municipalities of Talisay, San Nicolas, Agoncillo, Laurel, Cuenca, Mataas na Kahoy, Balete, Tanauan, Malvar, Lipa, Alitagtag, Lemery Taal, Santa Teresita, San Jose, Batangas City, Calaca, Nasugbu, San Luis, San Pascual, Santo Tomas, Bauan, Balayan, and Tuy in the province of Batangas.

Research Instrument

The 40-item survey questionnaire of this research utilized modified questions from the study "The role, preparedness and management of nurses during disasters" of Magnaye et al. [4] that were also combined with self-made questions from an extensive review of related literature from published theses and journals relevant to this study.

Validation of Research Instrument

The research instrument of this study was subjected to a validation process to supplement the researchers' propositions and gather data from actual people who might take part in this advancement. The copies of the questionnaire were submitted to the research adviser and two other research experts to review the formulated survey form. It was also presented to the statistician for the reliability testing upon execution of the pilot study.

As a result of reliability testing, Table 1, Nurses' roles among elderly during pandemic, obtained a Cronbach alpha of 0.818, indicating a good remark. Table 2, Nurses' disaster preparedness among elderly during pandemic, attained an excellent remark with a Cronbach alpha of 0.905. While Table 3, Nurses' disaster management among elderly during pandemic got an acceptable remark with a Cronbach alpha of 0.714. Lastly, Table 4, Challenges among nurses in

taking care of the elderly during pandemic, acquired a Cronbach alpha of 0.897, indicating a good remark. All these aid in improving and refining its contents as the research instrument of this study.

Data Gathering Procedure

A letter of request to conduct a survey was sent via email to the respective authorities of the institutions included in this research. The letter was also composed of the purposes of the study, data collection procedure, and assurance to protect all the respondents' confidentiality.

After approval of the institutions' authorities, a copy of an informed consent form indicating the objectives of the study, rights to refuse the participation, and the respondents' assurance of identity protection were provided to the participants. Google Forms was employed in facilitating the survey questionnaire. Upon obtaining the respondents' approval to participate, the link of the Google Forms survey was sent through their email addresses. The data gathering occurred from February 23, 2021, up to May 18, 2021.

Data Analysis

After collecting all the responses from the distributed survey questionnaires, the respondents' answers were tallied, tabulated, and analyzed. Furthermore, the answers to the survey questionnaires were recorded with different statistical treatments. Frequency count was used to audit the participants' responses about the roles they portray and actions they perform as preparation and management in sustaining the elderlies' needs in times of disasters within the duration of the COVID-19 pandemic. Likewise, weighted mean and ranking assisted in determining the average and order of responses according to the magnitude of indicators. Also, composite mean was utilized to discover the overall frequency of performance of the nurses' roles, measures for disaster preparedness and management among elderly during pandemic, and their encounter for challenges upon taking care of the elderly during pandemic.

Aside from that, Pearson Product-Moment Correlation Coefficient was also utilized as an inferential statistical tool to assesses the strength and direction of correlation between variables recorded on a scale of at least one interval [5]. This helped determine the significant relationship between nurses' disaster preparedness, nurses' disaster management, and challenges among nurses in taking care of elderly during pandemic.

Ethical Considerations

To protect the respondents and institutions included in the study, actions to appropriately address the research ethics were considered. Upon receiving permission to conduct the research study from the Dean of the College of Nursing and the respective authorities of the institutions involved, informed consent forms were distributed to the participants. With that, the researchers were transparent in sharing the relevant information by discussing the purpose of the study, rights to refuse the participation, assurance of providing them confidentiality and anonymity, manner on how the data would be collected, approximate time in answering the questionnaire, and utilization of the results of the study.

RESULTS AND DISCUSSION

Table 1 shows that nurses always perform their roles among elderly during pandemic with a composite mean of 3.67. This indicates that nurses are aware of their primary responsibilities in taking care of the elderly in the community and still manage to accomplish those even amidst the trials presented by the pandemic. Among the items cited, prioritizing the safety of elderly people in the community since they belong to the high-risk groups who are susceptible to acquiring the COVID-19 disease (3.85), providing quality health care for elderly people regardless of their gender and type of disease or reason for seeking medical attention (3.82), and acting to diverse tasks with professionalism, efficiency and above all-caring (3.82) got the highest ratings.

Now that the threat of contracting COVID-19 has been more prevalent, the result reflects that nurses use that role in protecting the health of elderlies who have been highly susceptible to this illness. In consideration of their existing vulnerabilities, nurses strive to anticipate the health care needs of the elderlies to assure that they could provide safety and protection, especially amidst the COVID-19 pandemic where these elderlies greatly needed essential care and security. To make older persons feel safe and secure, nurses give them constant attention and priority in delivering the necessary measures and standard medical care they need. As a result, high-quality treatment for their health concerns was achieved by providing a person-centered care approach [6]. Also, the care management programs offered by nurses are consistently centered on sustaining the health care needs of clients who require high-volume services like the frail elderlies who are at a higher risk of poor health outcomes, illness, and mortality, as well as those with complex comorbid medical disorders [7]. Furthermore, due to the difficulties that the Filipino elderlies encounter, nurses have been assigned to help them whenever feasible.

Table 1. Nurses' Roles among Elderly during Pandemic

	WM	VI	R
1. I provide quality health care for elderly people regardless of their gender and type of disease or reason for seeking medical attention.	3.82	Always	2.5
2. I balance compassion with professionalism, while arranging appropriate care for elderly people regarding their health concerns.	3.81	Always	4
3. I perform contact tracing, conducting investigations, and engaging in surveillance among elderly people in the community.	3.49	Often	10
4. I take responsibilities on prevention, response, and recovery for the elderly during disasters during pandemic.	3.52	Always	9
5. I prioritize the safety of elderly people in the community since they belong to the high-risk groups who are susceptible to acquiring the COVID-19.	3.85	Always	1
6. I educate elderly and their families about COVID-19 regarding its prevention measures and early identification of symptoms to promote health awareness.	3.54	Always	8
7. I require strict adherence of standard health protocols among elderly to help them prevent contracting communicable diseases during pandemic.	3.78	Always	5
8. I establish a therapeutic environment that is equipped to address the physiological, psychological, and social needs of the elderly.	3.56	Always	7
9. I respond timely to emergency situations and assure to open communication to elderly patients and their families, and other medical professionals in order to provide them accurate medical therapeutic intervention during pandemic.	3.60	Always	6
10. I take action to diverse tasks with professionalism, efficiency and above all- caring.	3.82	Always	2.5
Composite Mean	3.67	Always	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 – 1.49 = Never

During the pandemic, nurses were charged on monitoring the elderly to assess their needs and ensuring they can cope on their own [8].

On the other hand, performing contact tracing, conducting investigations, and engaging in surveillance among elderly people in the community got the lowest mean value (3.49). Contact tracing is a procedure that aims to detect, manage, and confine existing and potential cases of an infectious illness so that future human-to-human transmission can be controlled and prevented (Centers for Disease Control and Prevention [CDC], 2020). Nurses are well-positioned to serve as case investigators and contact tracing monitors because of their knowledge of the community and their application of the framework's principles and components [9]. However, contact tracing, along with case investigations and surveillance, has now been less likely performed by nurses, but by other health sectors in the society instead.

Table 2 shows that nurses often perform measures for disaster preparedness among elderly during pandemic with a composite mean of 3.28.

This implies that although institutions and organizations facilitate trainings and seminars for nurses focusing on the enhancement of their disaster preparedness, there is still incomplete delivery of programs directed for responding and supporting the health care needs of the elderly groups during catastrophic situations amidst the pandemic.

Among the items cited, using the basic and continuing education to improve understanding of the need for competency in disaster response for elderly (3.52), equipping self in acquiring practical experiences in providing care during disaster and use this experience to facilitate proper interventions to elderly patients (3.51), and developing mechanisms to increase rush capability, while maintaining expertise and competence in handling emergency situations for elderly during disasters in the midst of pandemic (3.44) got the highest ratings.

The study's findings highlight the importance of continuous education for nurses' preparation in dealing with older people during catastrophes.

Table 2. Nurses' disaster preparedness among elderly during pandemic

Indicators	WM	VI	R
1. I use the basic and continuing education to improve understanding of the need for competency in disaster response for elderly.	3.52	Always	1
2. My institution organizes programs and trainings to promote a better preparation for emergency response to vulnerable groups like elderly in times of disasters in the midst of pandemic.	3.34	Often	5
3. I equip myself in acquiring practical experiences in providing care during disaster and use this experience to facilitate proper interventions to elderly patients.	3.51	Always	2
4. I attend in seminars about the appropriate ways of equipping the elderly groups and their families for household emergency preparedness during COVID-19 pandemic.	3.02	Often	10
5. I participate in emergency evacuation training for older adults that can be employed in both natural and manmade disasters in the midst of pandemic.	3.06	Often	9
6. I join in the infection prevention and control seminars that is particularly applicable among elderly during disasters in the period of COVID-19 pandemic.	3.19	Often	6
7. I participate in disaster drills at my workplace on a regular basis.	3.38	Often	4
8. I join in assemblies that address enhancement of skills in providing psychosocial counselling and support for elderly people who may undergo traumatic experiences brought about by disasters during pandemic.	3.18	Often	7
9. I attend in trainings that improve skills in providing first aid service specifically for older adults.	3.15	Often	8
10. I develop mechanisms to increase rush capability, while maintaining expertise and competence in handling emergency situations for elderly during disasters in the midst of pandemic.	3.44	Often	3
Composite Mean	3.28	Often	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 – 1.49 = Never

Nurses continue to seek for personal and professional development by the enrichment of technical or customized knowledge and skills as health care professionals who assist in the resolution of issues for service in their specialized area of discipline. As a result of this, nurses who are more prepared tend to provide better care to the elderly groups needing support and management.

Disaster preparedness has been incorporated into the nursing curriculum, emphasizing principles and patient management in the event of a disaster [10]. Several studies have highlighted the importance of disaster nursing education in enhancing disaster knowledge and skills in preparation for their response. Nurses who have previously completed disaster nursing education have a higher level of personal preparedness for disaster response [11].

However, attending in seminars about the appropriate ways of equipping the elderly groups and their families for household emergency preparedness during COVID-19 pandemic, got the lowest mean value (3.02).

There might be numerous seminars and training for nurses to further enhance their knowledge and skills yet, it lacks assemblies mainly focused on equipping them about the proper measures for household emergency preparedness for the elderly and their families. People can be equipped in a disaster if they are aware of and plan for the sorts of catastrophes to which they are most vulnerable, establish a social interaction and evacuation plan in the event of a crisis, and organize a necessary disaster supply pack [12].

Table 3 shows that nurses often perform the disaster management among elderly during pandemic. with a composite mean of 3.43.

This relates to the results gathered from the table 2 in which due to the nurses' curtailed attendance on seminars and assemblies that can boost their disaster preparedness in responding to the vulnerable groups of the elderly during disasters, they also often work on the principal measures for the efficient disaster management in assisting the elderlies during disasters amidst the pandemic. Premise on this that being prepared leads to adequate management of a situation even in times of crises.

Table 3. Nurses' Disaster Management among Elderly During Pandemic

	WM	VI	R
1. I work with emergency planners and local government authorities in organizing courses of actions for elderly for incoming disasters, evacuation and provision of care to elderly patients during emergencies in the period of COVID-19 pandemic.	3.28	Often	9
2. I integrate the physiological, psychological, social, and family-oriented aspects of care during disasters while considering the special health needs of elderly.	3.37	Often	8
3. I can educate the older adults and their families about emergency preparedness that is essential in the arrival of disasters in the midst of pandemic.	3.45	Often	6
4. I inform and require the elderly people about the practice of infection prevention and control measures in all phases of disaster especially within the period of COVID-19 pandemic.	3.51	Always	4
5. When disaster strikes, I work systematically to ensure that no one is abandoned, even the bed-ridden and physically disabled elderlies particularly in access of isolated areas.	3.49	Often	5
6. I assist in seeking and providing a safe site for evacuation where equitable distribution of necessary supplies and services will be accessible.	3.54	Always	3
7. I monitor the well-being and identify the signs and symptoms of injury or incident to older adults when responding to disasters.	3.57	Always	2
8. I provide the advanced first aid to older adults when required to support the emergency services in the rescue efforts for disasters.	3.44	Often	7
9. I deliver counseling and one-to-one support when required for elderly people who have lost family members, homes and livelihood brought about by disasters within the period of pandemic.	3.05	Often	10
10. I am able to work under pressure and remain calm, even the situation is difficult to handle.	3.62	Always	1
Composite Mean	3.43	Often	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 – 1.49 = Never

Among the items cited, working under pressure and remaining calm, even if the situation is difficult to handle (3.62), monitoring the well-being of patients and identifying the signs and symptoms of injury or incident to older adults when responding to disasters (3.57), and assisting in seeking and providing a safe site for evacuation where equitable distribution of necessary supplies and services will be accessible (3.54) got the highest ratings.

Nurses are fortified with calmness and composure even when working under pressure in handling emergencies [13]. They may be troubled by the unsettling events happening within disaster scenarios, but they manage to be unruffled to properly strategize about their subsequent management for the elderlies and other community members in these situations. This is a fundamental characteristic, especially during these circumstances, as it may help alleviate the apprehensive feelings of the elderly patients brought about by the emergency and disasters. Nurses still manage to provide a comforting nursing

environment to disaster victims while they perform their interventions to the people affected by these events, allowing them to focus on the demands of the situation [14].

Nonetheless, delivering counsel and one-to-one support when required for elderly people who have lost family members, homes and livelihood brought about by disasters within the period of pandemic (3.05). Disasters are agonizing for those affected people. With that, psychological counseling is required as they rehabilitate from these circumstances. COVID-19 has harmed the lives and health of over millions of individuals throughout the world and overwhelmed the healthcare system. Nurses experienced significant challenges caused by the pandemic, including a critical shortage of nurses and medical supplies, and the risk of infection, resulting them to be hesitant in providing one-on-one care to clients. Aiding and addressing the needs of nurses will help them respond more confidently and appropriately to the needs of their clients amidst crises [15].

Table 4. Challenges Among Nurses in Taking Care of Elderly During Pandemic

	WM	VI	R
1. I am hindered by the limited face-to-face interaction in providing home care visit to elderly people needing health assistance and surveillance.	3.11	Often	2
2. I experience a shortage of nurses in my institution that impedes to meet the increased health care needs of the elderly in the community.	3.09	Often	3
3. I encounter having insufficient personal protective equipment and medical supplies that help to reduce the spread of infection.	2.85	Often	8
4. I fear of having increased risk of contracting the virus for myself and my family due to my exposure to different kinds of people in fulfilling my nursing roles.	3.46	Often	1
5. I experience discrimination by the society as a health worker which affects my self-esteem in interacting and providing care with the people especially the vulnerable elderly in the community.	2.88	Often	7
6. I feel pressured in intervening with elderly patients as they require more complex and time-consuming care that may result to poorer health outcomes.	2.92	Often	6
7. I have inadequate training in taking care of elderly people affected by the COVID 19 due to lack of programs and facilities in my institution that supports it.	2.75	Often	10
8. I experience an unfavorable atmosphere for elderly care brought about by stressful and emotional environment especially in times of disasters.	2.76	Often	9
9. I encounter an inadequate allocation of medication, and health supplies provided by the government for the elderly needing intensive care especially during disasters in the midst of pandemic.	2.95	Often	5
10. I experience physical and emotional exhaustions caused by overloaded tasks that reduces my abilities to competently provide care for elderly.	3.04	Often	4
Composite Mean	2.98	Often	

Legend: 3.50 – 4.00 = Always; 2.50 – 3.49 = Often; 1.50 – 2.49 = Sometimes; 1.00 – 1.49 = Never

Table 4 presents that nurses often experience challenges in taking care of elderly during pandemic with a composite mean of 2.98. It reflects that as health care professionals concern for the safety of the people in the community, especially of the elderly, encountering challenges in serving them amidst the pandemic has been inevitable because of the dangerous circumstances the pandemic poses. Among the items cited, fear of having increased risk of contracting the virus for themselves and their family due to their exposure to different kinds of people in fulfilling their nursing roles (3.46), being hindered by the limited face-to-face interaction in providing home care visit to elderly people needing health assistance and surveillance (3.11), and there is a nursing shortage, which makes it difficult to address the rising health care needs of the elderly in the community (3.09) got the highest rating. Nurses risk their lives to carry out their nursing duties in promoting health wellness and preventing illness among their clients. However, as high-risk individuals, they are still concerned about becoming infected or unintentionally infecting their elderly patients and relatives.

It affects their mindset while working as health care professionals, knowing how life-threatening the COVID-19 disease could be. Galehdar et al. [16] found out that nurses experience death anxiety due to excessive exposure to the nature of the disease, fear of unknowingly passing the virus to others, and emotional stress. However, the implementation and compliance of proper protocols could mitigate the effects of anxiety on the nurse's mental health. Job responsibilities and attendance at COVID-19-related training were also discovered to predict anxiety of contracting COVID-19 among their nurse respondents [17]. Furthermore, a greater fear of COVID-19 was connected to lower work satisfaction, increased psychological discomfort, and organizational and professional turnover intentions in the workplace in the Philippine setting [18]. On the other hand, having inadequate training in taking care of elderly people affected by the COVID19 due to lack of programs and facilities in the institution with a weighted mean of 2.75 obtained the lowest rating. Nurses are given a variety of trainings to help them develop their psychological traits and firstaid skills. They can make quick assessments and judgments in an emergency, take appropriate measures, closely monitor disease states,

and accurately and timely follow doctor's advice [19]. Furthermore, nurses who had worked previously through pandemic reported a higher level of competence to deal with such events in the future [20] and were less

afraid of contracting the disease than their fellow employees who had not, demonstrating that experience can reduce fears.

Table 5. Relationship Between Nurses' Disaster Preparedness, Nurses' Disaster Management, and Challenges among Nurses in Taking Care of Elderly during Pandemic

	r-value	p-value	Interpretation
Nurses' Disaster Preparedness	-0.023	0.766	Not Significant
Nurses' Disaster Management	0.001	0.988	Not Significant

Legend: Significant at p-value < 0.01

Table 5 depicts the association between nurses' disaster preparedness, nurses' disaster management, and challenges among nurses in taking care of the elderly during pandemic. It was observed that the obtained r-values indicate an almost negligible correlation, and the computed p-values were greater than the 0.05 alpha levels. This means that no significant relationship exists between the indicators and implies that the nurses' disaster preparedness and management were not affected by the challenges experienced.

Cayaban et al. [21] reported that the past experiences of nurses and having disaster-related training helps them to increase preparedness response but sometimes shows a lack of confidence in doing so. With that, the findings of their study provide evidence that with proper training, sufficient disaster education, and adequate involvement in assemblies and programs about disaster preparedness, nurses will effectively manage and handle emergency and disaster situations despite the shortcomings that may arise.

CONCLUSION AND RECOMMENDATION

After the results were analyzed, the following are therefore concluded: Nurses always fulfill their roles as health care professionals in rendering care and service to the elderly in the community, who are considered highly susceptible individuals during pandemic. Nurses exploit their educational attainment, develop practical experiences, and join in different seminars and training to equip and prepare them in responding to disasters, especially amidst pandemic; however, institutions and organizations have insufficient programs and activities that particularly target and prioritize the needs of the elderly groups during these situations. Nurses perform the integral measures for disaster management among

elderly during pandemic as they sustain their basic health needs; yet, uplifting their mental health status was being disregarded despite experiencing traumatic events brought about by the disasters. During the pandemic, nurses often experience challenges in taking care of the elderly, wherein the fear of having increased risk of contracting the virus for themselves and their family due to exposure to different kinds of people as they fulfil their nursing roles was mostly suffered by nurses. Nurses implement measures to develop their disaster preparedness and management among elderly without being affected by the challenges they encounter in taking care of this group of individuals during pandemic.

Based on the accumulated findings, this study sought to provide the following recommendations: Hospital administrators and Local Government Units, in coordination with the City Health Office or Provincial Health Office and Red Cross Organization, must deliver high-standard training programs to improve nurse's knowledge and skills in responding to disasters, taking note of the exclusive measures to perform among the elderly while considering their special health care needs during a pandemic. Nurses must also be encouraged to engage in and seek out training opportunities in mock disaster drills and actual disaster events. Promote the involvement of nurses in the meetings and assemblies with the local government authorities and other emergency responders in organizing courses of action for the incoming disasters, evacuation, and provision of care to the elderly groups to highlight the consideration for their essential health care needs and further engage nurses in responding to disaster events. Boost utilization of telemedicine among nurses to maximize

communication between elderly clients and other health care providers in monitoring their health condition while enabling them to stay at home, reducing the risk of transmitting communicable and infectious diseases during pandemic.

Additional research relating to this study must further be done to support the measures in accomplishing the nurses' roles, improving disaster preparedness and management, and overcoming challenges in taking care of the elderly during pandemic, for the benefit of both the older population and the nursing profession. This study may serve as a reliable reference for other researchers who aim to further explore the nurses' roles, disaster preparedness, and management among the elderly during pandemic in different perspectives and practices of a larger scale of nurses in various fields and broader locales.

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