Fear, Stress, and Readiness in Handling COVID-19 Patients among Nurses

Christopher R. Pateña, RN[1] and Gelbert Jan S. Porque, MAN, RN[2]
[1]*Staff Nurse, West Visayas State University Medical Center*
[2]*Faculty, Central Philippine University*

Abstract

Readiness of nurses in handling COVID-19 patients is crucial for them to be effective and efficient on the bedside. Also, fear and stress creates a lasting impact on how the healthcare workers perform during this health emergency. The study explored the strength of the relationship between fear, stress, and readiness in handling COVID-19 patients in a private hospital in Iloilo City, Philippines. The data were gathered using the Fear of COVID-19 Scale by Ahorsu et al., (2020), Perceived Stress Scale by Cohen (2021), and a researcher-made, validated Readiness Scale. Majority of the nurse respondents experienced moderate levels of fear in handling COVID-19 patients and had moderate levels of stress. Despite this, majority had high level of readiness. The levels of readiness decrease as the level of fear and stress increase during the unanticipated times of pandemic. Stress management programs and addressing fear of staff nurses during unprecedented times of pandemic is crucial to ensure their readiness.

Keywords: *Nurses Assignment to COVID, Fear of COVID 19, COVID-Related Stress*

INTRODUCTION

Background and Rationale of the Study

Coronavirus disease which is well known as COVID-19 is a contagious infection from the SARS - CoV-2 strain virus (WHO, 2020). A few will develop into seriously afflicted and may require necessity for medical attention. Elderly and those with comorbidities and medical cases are prone to evolve to severe illness. Anyone can be prone to COVID-19 and may become very ill, progress into complications or die at any age.

Nurse readiness is essential in continuing health functional services, mitigating and controlling the escalation of COVID-19 (Alquwez et al., 2021). It usually comprises the prevention, assessment, containment, management, controlling, monitoring, and diagnosing of people with COVID-19 and those who are in close contact to them by organizing and applying facility minimums health protocol.

According to projections made by the World Health Organization, a significant surge of confirmed cases with infected individuals would continue to strain hospital beds, resources, and staff, making it impossible to care for additional patients (WHO, 2021). During the start of COVID-19 pandemic, no health facility has a compelling clinical pathway and containment process, resources like PPEs are insufficient; and there is an increase in the work capacities of nurses. Mental health problems are factors that arise, to mention some, irritability, physical and mental exhaustion, and stress, among nurses (Balay-odao et al., 2021).

The consequences brought about by this pandemic are presumed to develop nurses more likely to have psychological aberrations (Fritscher, 2022). With the impending effect of COVID-19 and extra workloads given to nurses, there is a need to develop factors to protect nurses to safeguard their psychological well-being. In line with one of the prime pieces of evidence, Bartzik (2021) hypothesized that there is an indirect correlational association between pandemic-related perceived stress and frequency of flow experiences, same with the contentment in work, life, rigor, and as a whole being. As defensive factors in dealing with stress related to this pandemic, he suggested an individual's sense of humor and recognized self-recognition.

In circumstances of pandemic which requires health emergencies, like the COVID-19, nurses are placed in the frontline works to combat, doing face to face interventions with patients affected by the deadly virus. Frontliners actively immersed in fighting against COVID-19, having nurses lay open to danger and risking to be infected which moreover can have major impact to mental stability of individual as they are expected to have more workload than pre-pandemic and emotional burden in many front-line operating contexts (Galleta, et al, 2021).

However, the readiness of the staff nurse is still a gray area. In Dubai, they have found that the concerns be facing by nurses can be discussed into two main points: (1) shortages of staffing, depression maybe associated to fear of infection and anxiety, a poor communication with patients, and fatigue related to long working hours, not receiving due compensation and (2) not enough supply of medical instrumental needs like machines and resources like

protective clothing also called as PPE (Al Thobaity, 2020).

In the Philippines, from month of January 2020 until December 2021, an estimated total of 2.8 million COVID-19 confirmed cases with more than 50 thousand deaths were reported (WHO, 2021). Locally, the virus reached Western Visayas in March 2020. The Iloilo provincial government was hiring nurses and medical doctors to augment hospital capacity in its response against the COVID-19. The provincial administrator noticed slowing in the hiring process because the additional human resources will be performing COVID-19 dedicated duties. (Mamon, 2021)

Nurses need to improve their level of readiness to be mindful and alert to control and attend to new cases of Coronavirus-19. They shall develop to respond to various public health emergencies, bearing in mind that fronting the pandemic needs situational leadership and style of interventions wherein there is no one-size-fits-all approach to control cases and flare-up of COVID-19. Every healthcare worker should identify the risk and immediately execute the necessary course of action at the pertinent scale to mitigate both COVID-19 spread that may affect the general public economically, and socially.

With this pandemic, healthcare workers are hesitant to be deployed in facilities. Many of them resigned from their professions at the onset of the pandemic. The healthcare facilities suffered manpower deficits due to massive resignation of its employees and slow turnover of hiring for augmentation and replacements of the latter. Stress and fear are some of the factors considered in the turnout of this event. One reason for their lack of readiness to be assigned in the COVID-19 area is the fear.

Considering the stress and fear of nurses to be deployed in the COVID-19 area could be an important aspect of consideration, as it will manifest in the turn out of their effectiveness in dealing with COVID-19 positive patients. Exploring the relationships among fear, stress, and the readiness of nurses to be assigned in the COVID area could be important in the healthcare system as it entails more effective stirring of staff within the institution, thus the conduct of this study.

Objectives of the Study

This study aimed to determine the level of fear, stress, and readiness in handling COVID-19 patients among nurses in a private hospital in Iloilo City, Philippines.

Specifically, this study aimed to:

1. determine the level of fear on COVID-19 among the staff nurses;
2. determine the level of stress among the staff nurses;
3. determine the level of readiness on handling COVID-19 patients among nurses;
4. determine whether there was a significant relationship between the fear on COVID-19 and readiness in handling COVID-19 patients and;
5. determine whether there was a significant relationship between the level of stress and readiness in handling COVID-19 patients.

Theoretical and Conceptual Framework

This correlational study was anchored on the Protective Action Decision Making Model (PADM) Lindell (2018). It was developed to help explain how people decide when and how to act in an unfamiliar event or emergency. The model posits that environmental and social cues, informational sources, channel approach and performance, warning messages, and receiver attributes may have a great impact on one's decision in dealing with relatively new or unfamiliar situations. The elements, individually and in entirety, aid in the individual's behavioral response.
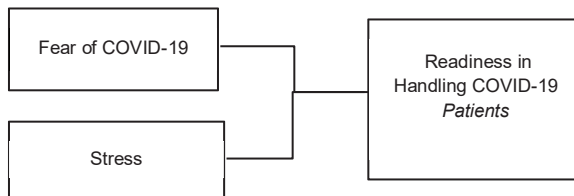

Figure 1. Schematic Diagram showing the Assumed Relationship of Variables

Definition of Terms

Fear. It is a feeling of being afraid or an unpleasant emotion caused by being aware of instability (Fritscher, 2022). Fear results from being threatened with harm of either physical, emotional, and psychological. It has been considered traditionally as a "negative" emotion; fear actually helps people be safe through preparation to avoid possible danger. In this study, fear was the feeling of dread of nurses that might affect their readiness in handling COVID-19 patients. It was measured by using the Fear of COVID-19 Scale by Ahorsu et al., (2020). It is composed of seven (7) questions and answerable in a five-level Likert scale as follows:

"strongly disagree," "disagree," "neutral," "agree," and "strongly agree." The possible lowest score for each question is 1 and the maximum is 5. Total score could be determined by summing up each item score ranging from 7-35 (Ahorsu et al., 2020). It was categorized as follows: "Low Fear" if the score is 7 to 14; 15 to 25 is "Moderate Fear", and 26 to 35 for "High Perception of Fear."

Stress. It is a perception of physical pressure and emotional tension, it may result from any event or thinking that makes one feel angry, frustrated, and nervous. In this study, stress was defined as the perception of nurses when being deployed in the COVID-19 area as their workloads will be increased, as expected due to demands of this viral infection. Stress levels were assessed by using Perceived Stress Scale (PSS) by Sheldon Cohen (2021). It is a 10-item questionnaire with five Likert-type answers. Scoring was obtained by summing up across the scales. It is categorized as "Low Stress" for scores ranging 0-13, "Moderate Stress" for scores 14-26, and "High Perceived Stress" for scores ranging 27-40.

Readiness. The degree of preparedness to act or respond to a particular stimulus. It is the quality or state of being ready or a state of preparation and willingness (Sam, 2013). In this study, readiness was defined as what level the nurse could be able to perceive their preparedness in handling COVID-19 patients. It was measured using a Likert-type scale with five (5) items in each question, which comprises ten (10) questions. Scores will be added with a minimum scoring of 0 and maximum of 40. It is categorized as "Low Readiness" if the sum is 24 and below, "Average Readiness" if the sum is 25 to 34, "High Level of Readiness" if the sum is 35 to 40.

Significance of the Study

The findings of the study were deemed to be beneficial to the following:

Nurses. This study increased their awareness on how they can foresee and brief themselves in handling patients with COVID-19. Allowing them to prepare holistically before being deployed in the COVID-19 areas. This study would be relevant for it may help them prepare when they are in need to augment staffing in the COVID-19 areas.

Nurse Managers and Human Resource Management Staff. It will also benefit the nurse managers in deploying bedside nurses to COVID-19 areas, ensuring readiness and providing opportunities to perform fear and stress debriefing before they are assigned. They will also include seminars and activities pertaining to stress and fear reduction when deploying healthcare workers in the area.

Future Researchers. This study may assist future researchers in formulating related research problems and it may also serve as a basis for their future study. It is apparent that there are numerous emerging variants of COVID-19 that cause nurses and other healthcare workers worry about their professions, this study may serve as a spring-board for other members of the healthcare team to study and consider new programs and trainings to combat fear and stress as a breakthrough for this problem.

Scope and Limitations of the Study

This descriptive correlational study aimed to determine the relationships of fear, stress, and readiness in handling COVID patients of nurses of a private hospital in Iloilo City during the first year of pandemic from March 2020 to March 2021.

This study was initially planned to be conducted in September to October 2022; however, the actual data gathering period was November to December 2022.

REVIEW OF RELATED LITERATURE

Review of Related Concepts
COVID-19 Pandemic and the Healthcare Workforce

Coronavirus disease which is well known as COVID-19 is a contagious infection from the SARS - CoV-2 strain. Mild respiratory illness will be the most common presentations of people infected with the virus and they may be cured and regain optimum health without requiring medical attention and treatment. A few will develop into seriously afflicted and may require necessity for medical attention. Elderly and those with comorbidities like heart and lung diseases, diabetes mellitus and cellular aberration, such medical cases are prone to evolve to severe illness. Everyone can be sick of COVID-19 and may become very ill, progress into complications or die at any age (WHO, 2021.)

COVID-19 has afflicted the life and well-being of not less than one million people across the world. This pandemic over powered several regions' healthcare workforce and systems and greatly disturbed the frontliners like nurses battling on healthcare facilities to protect the lives of each individual infected by the deadly (Al Thobaity, 2020). Considering the issues and hindrances of nurses in facing the battle would be contributory in developing protocols and planning different strategies to improve the preparedness in combating this pandemic; thus, this integrative review will scrutinize every issue the nurses are facing to address and develop responses to the COVID-19 crisis. Evidence about the behavior of civil society organizations, like the Sereni Association, is produced by

transdisciplinary research. Institutions must use this evidence to pinpoint and correct public health response flaws in order to help communities get ready for emerging infectious threats (Alfieri, C., et al, 2020).

Every country is equipped with vital gems and resources called Health-care providers (Liu, Q., 2020.) With continuous patient safety care, including taking care of patients with communicable diseases, their health and safety are at stake, much more on dealing with emergent control of outbreaks. Severe acute respiratory syndrome (SARS) and Middle East respiratory syndrome (MERS) outbreaks were some of the dangerous and well-known happenings of the past that lead to devastating number of deaths, which made nurses to experience high level of stress related to prone of infection, discrimination, lack of staff to maintain manpower, uncertainty, stigmatization, thus leading to a development of comprehensive support as a priority to maintain the healthcare workers' mental stability. Anxiety, depression, insomnia, and stress are some of the mental health risks arising to frontline health workers treating patients with COVID-19 based on some findings of quantitative research. Healthcare workers without training and experience in handling infectious diseases are facing an additional challenge as they try to adjust to a difficult setting and new environment surrounded by stress (Liu et al., 2020.)

Review of Related Studies
Fear of COVID-19

Three characteristics can be used to differentiate between the various types of frightful experiences: intensity, timing, and coping. How severe is the threat? When will the harm occur? Will it happen soon? What steps, if any, may be made to lessen or remove the threat? The threat of injury, whether actual or imagined, is the primary cause of all forms of fear. Our physical, emotional, or psychological health may be at risk. While most of us have particular things that make us fearful, we can learn to be scared of almost anything.

The acute scarcity of nurses, beds, and medical supplies, including personal protective equipment (PPE), as well as reviews suggest psychological alterations and fear of infection among nursing staff, are the main problems nurses are currently facing. Increase in the number of persons affected with COVID-19 poses a threat to the healthcare workers particularly the nurses which compose the majority group of healthcare members (Fernandez et al., 2020; Goh et al., 2021). The significance of these factors shall be an eye opener for everyone to give ample support and establish the nursing needs worldwide to assure that they can work effectively in combat with COVID-19 crisis with much more confidence in themselves. Moreover, this might develop readiness for everyone in combating pandemics and reconsider issues when doing strategic plans. According to Karger (2020), supporting the nurses as they are in the critical frontline make up the defense in every emergent situation like this.

Stress

The work performance of clinical nurses may decline in response to increasing workloads added up by undue effects of this pandemic which causes psychological burden for them. Nurses are making themselves available to do bedside interventions extensively to safeguard and ensure patient's safety and needs are employed. As they give their all to the fight against this illness, preserving their mental stability and strengthening their knowledge and skills to deal with the infection are equally crucial. With the possibility of acquiring the disease more likely, because nurses are in the frontline to address such issues, this may cause fear and anxiety (Balay-odao et al., 2021). They do not have the choice but to face the critical situations and negative conditions that may increase the chances of mental health instability and psychological alterations. The difficulties that healthcare professionals are facing in this crisis could harm them, as well as, ruin the quality of work they are performing in caring with patients (Penwell-Waines et al., 2018). According to a recent study of Ayling (2022), those who were more stressed, anxious, or depressed during the beginning of the pandemic were more likely to have COVID-19. The study discovered a significant relationship between subjects subsequently reporting SARS-CoV-2 infection, a greater number of symptoms, and more severe symptoms, and greater psychological distress during the early stage of the epidemic.

Readiness on Handling COVID-19 Patients

Nurse readiness and resilience are essential for the mental health of nurses as they work in a setting that requires them to be adaptable and quick to react toward any stressors. This is due to the never-ending efforts being made to mitigate the annihilating effects of COVID-19 and stop the spread of contagious disease. Many countries that first faced the pandemic provided other regions have an idea on how to mitigate the effects of pandemic in the welfare system and healthcare workers (Alfieri et al., 2020; Armocida et al., 2020; Oliva et al., 2020). Healthcare providers such as nurses, doctors and other healthcare team members reported burnout and other psychological distress symptoms as they are in the frontline of the defense in combat with the COVID-19 (Barello et al., 2020; Giusti et al., 2020; Marton et al., 2020). The novel coronavirus is a global pandemic that claimed the lives of many people, including medical staff. That puts a strain on the healthcare systems in every nation. Studies on the COVID-19 pandemic are now being conducted in several aspects. Few studies, meanwhile, have looked at the obstacles that affect the use of COVID-19 prevention strategies (Mersha, A., et al, 2021).

METHODOLOGY

Research Design

This descriptive correlational study aimed to determine the level of fear, stress, and readiness in handling COVID-19 patients among nurses in a private hospital in Iloilo City.

Study Population and Sampling Technique

The study population involved all the nurses employed in different units in the selected hospital in Iloilo City with a total of 102 nurses (N = 102) according to the Human   Resource Department of the hospital. The nurses were asked to answer the questionnaire pertaining to their fear, stress, and readiness during the first year of COVID-19 pandemic from March 2020 to March 2021. A sample size of 81 was determined from N = 102 using online sample size calculator by Raosoft (2011) with 5% margin of error and 95% level of confidence.

The participants were chosen based on the following inclusion criteria: 1) employed either in probationary or regular status and 2) employed during the first year of the pandemic (March 2020 – March 2021).

Research Setting

This descriptive correlational study was conducted in a private hospital in Iloilo City. A questionnaire was given to participants via printed form who are currently employed nurses in the healthcare institution.

Research Instrumentation

This study utilized hard copy questionnaire form, in which the respondents were asked to answer the questions with regards to their experiences during the first year of COVID-19 pandemic. The first division was the document that provided information with regards to this study. An informed consent form and letter to the participants were attached to the first part of the questionnaire.

The questionnaire was divided into three parts: Part 1 is Fear of COVID-19 Questionnaire, which was adopted from Ahorsu, et al (2020). It is composed of seven questions pertaining to fear with regards to COVID-19 and it is answerable by Likert scale. Part 2 was the Perceived Stress Scale, also an adopted questionnaire from Cohen (2021). The participants were asked ten (10) questions to answer perceived stress they have been experiencing in a particular situation. In this case, it referred   to the stress related to being assigned to the COVID 19 ward. Part 3, the Readiness in Handling COVID-19 Patients Scale score, it is a self-administered questionnaire suited to assess the readiness through knowledge, skills, and mastery of practice in taking care of COVID-19 patients by answering ten (10) questions and was sent to experts in nursing research and was already validated.

Validity and Reliability of the Study

For the validity of the questionnaire, the instruments in this research study were submitted to three validators who are master's prepared and are experts in the field of nursing administration and research at a private university in Iloilo City.

Reliability test was done with a pre-test of 12 respondents in order to ensure the reliability of the questionnaire which is 10% of the total population. The pretest respondents were not included as respondents of the study. The Cronbach's alpha of Fear Questionnaire was 0.896. Stress and Readiness Tools had 0.903 and 0.965 respectively. And it was held reliable as the Cronbach alpha of all the three scales were more than 0.70 (Polit and Beck, 2012).

Data Collection

Data was collected using manual printed copy questionnaires via the research   department of the healthcare institution. Data collection was done from November 2022 to December 2022. A questionnaire was researcher-developed, and it takes five to fifteen minutes to answer the questionnaire.

Ethical Considerations

This protocol was submitted to the Research Ethics Committee for review and approval. The REC has given clearance to conduct the study from October 17, 2022 to October 17, 2023 (REC Code 2022-199-MS-PATENA).

Data Processing and Analysis

In this study, the data was analyzed using Statistical Package for Social Sciences (SPSS) version 27 (IBM, 2022). Frequency distribution tables, mean, and standard deviation was determined for descriptive analysis.

For Part 1: Fear of COVID-19 Questionnaire: the responses were scored as follows: Strongly disagree – 1, Disagree – 2, Neutral – 3, Agree – 4, and Strongly Agree – 5. The sum of the score will be determined and will be categorized as follows: "Low Fear" if the sum is 7 to 14, "Moderate Fear" if the sum is 15 to 25, "High Perception of Fear" if the sum is 26 to 35.

For the second part of the questionnaire, the Perceived Stress Scale, it was scored as follows: Never – 0, Almost Never – 1, Sometimes – 2, Fairly Often – 3, and Often – 4. Negatively stated questions (4, 5, 7, and 8) will be reversed score as follows: Often is 0, Fairly Often is 1, Sometimes is 2, Almost Never is 3 and Never is 4. Individual scores on the PSS can range from 0 to 40 with higher scores indicating higher perceived stress. After the sum was determined, it was categorized as follows: "Low Stress" if the score is 0-13, "Moderate Stress" for 14-26 and "High Perceived Stress" if scores ranging from 27-40.

For the third part, Readiness in Handling COVID-19 Scale score: the responses were scored as follows: Strongly disagree -0, Disagree – 1, Neutral – 2, Agree – 3, and Strongly Agree – 4. The sum of the score will be determined and will be categorized as follows: "Low Readiness" if the sum is 24 and below, "Average Readiness" if the sum is 25 to 34, "High Level of Readiness" if the sum is 35 to 40.

The relationship between the variables was analyzed as association of ordinal variables using mean, percentage, and Gamma statistical test. Interpretation of Gamma statistical test are as follows: "+/- 0.00 to +/- 0.24" showed no association or relationship, "+/-0.25 to +/- 0.49" as weak association/ relationship, "+/- 0.50 to +/- 0.74" and "+/- 0.75 to +/- 1.00" as moderate and strong association or relationship respectively. The hypothesis was tested at alpha = 0.05.

RESULTS AND DISCUSSIONS

Nurses' Level of Fear

The table shows data on the distribution of respondents according to fear in the first year of COVID-19 pandemic (March 2020 to March 2021). More than half of the target population (51.9%) experienced moderate fear in dealing with patients infected with COVID-19 while a little more than a quarter (28.4%) displayed low fear.

The acute scarcity of nurses, beds, and medical supplies, including personal protective equipment (PPE), as well as reviews suggest psychological alterations and fear of infection among nursing staff, are the main problems nurses are currently facing. Increase in the number of persons affected with COVID-19 poses a threat to healthcare.

Table 1
Distribution of Respondents according to Level of Fear

Fear	f	%
Low Fear	23	28.4
Moderate Fear	42	51.9
High Fear	16	19.8
Total	81	100.0

Nurses' Level of Stress

Almost 4 in every 5 respondents (81.5%) experienced moderate stress during their course of work battling with COVID-19. Alarmingly, there is about one (1) in every 10 nurses (13.6 %) who experienced high levels of stress.

This is supported by the study that explored fear and anxiety among nurses in Dubai and China. Nurses are making themselves available to do bedside interventions extensively to safeguard and ensure patient's safety and needs are employed. As they give their all to the fight against this illness, preserving their mental stability and strengthening their knowledge and skills to deal with the infection are equally crucial. Since nurses' daily tasks are already quite stressful, and may cause unfavorable results on their mental health. With the idea of acquiring the disease more likely because nurses are in the frontline to address such issues, this may cause fear and anxiety (Balay-odao et al., 2021). The significance of this effort lies in the fact that it transforms the debate about the psychological dimension of the pandemic. The data from the study of Ayling (2022) showed that increased stress, anxiety, and depression are not only a consequence of coexisting with the pandemic, but may be factors that increase the risk of contracting SARS-CoV-2.

Table 2
Distribution of Respondents according to Stress

Stress	f	%
Low Stress	4	4.9
Moderate Stress	66	81.5
High Stress	11	13.6
Total	81	100.0

Nurses' Level of Readiness in Handling COVID-19 Patients

Majority of the nurses in this private hospital (84%) showed a high level of readiness. Followed by nurses with average readiness at 9.9% of the total target population. However, it is noted that only minimal nurses (6.2%) are displaying low readiness when it comes to handling patients with COVID-19.

Many countries that first faced the pandemic made other regions become aware on how to

mitigate the effects of pandemic in the welfare system and healthcare workers (Alfieri et al., 2020; Armocida et al., 2020; Oliva et al., 2020). Nurses would be very prudent in every aspect of their work even though there will be unexpected crises arising.

They are readily prepared anytime to be able to provide care to the patients, even risking their own health to maintain the equilibrium of confined individuals.

Table 3

Distribution of Respondents according to Readiness

Readiness	f	%
Low Readiness	5	6.2
Average Readiness	8	9.9
High Readiness	68	84.0
Total	**81**	**100.0**

Nurses' Level of Fear and Readiness on Handling COVID-19 Patients

Majority of the respondents who have low level readiness showed a high level of fear (56.25%). On the other hand, respondents with a high level of readiness are those who have a low level of fear (34.78%). Inferential analysis using Gamma revealed -0.462, indicating an inverse moderate relationship between fear and readiness. The null hypothesis is rejected (p value of 0.003 < alpha level of 0.05). This means that as the level of fear increases, the readiness in handling COVID-19 patients of the staff nurses tend to decrease.

The importance of these aspects should serve as a wake-up call for everyone to provide sufficient assistance and identify the nursing needs globally, in order to ensure efficiency in combating the COVID-19 crisis with much more self-assurance. Additionally, in doing so, everyone may become more prepared to fight pandemics and to reevaluate problems while making strategic plans. Support the nurses, says Karger (2020), because they are the vital first line of defense in every emergency circumstance.

Table 4

Relationship of Fear and Readiness on handling COVID-19 patients

Fear	Readiness							
	Low Readiness (24 & below)		Average Readiness (25-34)		High Readiness (35-40)		Total	
	f	%	f	%	f	%	f	%
Low Fear (7-14)	3	13.05	12	52.17	8	34.78	23	100
Moderate Fear (15-25)	12	28.57	23	54.76	7	16.67	42	100
High Fear (26-35)	9	56.25	5	31.25	2	12.5	16	100
Total	**24**	**29.63**	**40**	**49.38**	**17**	**20.99**	**81**	**100**

Gamma = -0.462*   p = 0.003

(*) significant at 0.05 p-value; (-) inverse relationship

Nurses' Level of Stress and Readiness on Handling COVID-19 Patients

There is a higher proportion of nurses with average readiness who had low-moderate stress (54.29%) compared to those with high stress (18.18%). Furthermore, almost a quarter (24.29%) of those who have high levels of readiness reported to have low to moderate stress. This trend is supported by the Gamma value of -0.893, indicating an inverse high correlation between stress and readiness of

nurses. The null hypothesis is rejected (p = 0.000 < alpha = 0.05). Therefore, it is concluded that as the level of stress increases, the level of readiness decreases. Low-moderate stress can lead to average-high readiness. It is congruent with the article of Lee, (2022), compared to the general community, all HCWs experienced equivalent stress from the current pandemic, regardless of the extent of their work.

Table 5

Relationship of Stress and Readiness on handling COVID-19 patients

Stress	Readiness							
	Low Readiness (24 & below)		Average Readiness (25-34)		High Readiness (35-40)		Total	
	f	%	f	%	f	%	f	%
Low to Moderate Stress (0-26)	15	21.42	38	54.29	17	24.29	70	100
High Stress (27-40)	9	81.82	2	18.18	0	0	11	100
Total	24	29.63	40	49.38	17	20.99	81	100

Gamma = -0.893*   p = 0.000

(*) significant at 0.05 p-value (-) inverse relationship

Conclusions

1. Nurses experienced fear in the care of patients with COVID-19.
2. Nurses are afraid of losing their lives because of COVID-19.
3. Nurses experienced moderate levels of stress in the care of patients with COVID-19.
4. Nurses have a high level of readiness in handling patients with COVID-19.
5. Fear has a great influence on the level of stress.
6. Fear has a huge impact on one's readiness in handling COVID-19 patients. The more nurses experience fear, the lesser they become ready and prepared for handling COVID-19 patients.
7. Stress also has a significant impact on how COVID-19 patients are treated since it renders nurses unable to provide bedside nursing care due to a lack of positive energy.

Recommendations

The following suggestions are made in light of the study's findings and conclusion:

1. Since there are three out of four nurses who show fear regarding COVID-19. And one (1) in every eight (8) nurses experiencing high levels of stress. Thus, it is recommended that nurse managers and institutions should employ fear and stress debriefing techniques for frontline nurses to be able to make themselves ready prior to deployment to COVID-19 areas. It is also suggested that nurses should not be deployed instantly to these areas without proper training and interventions to prevent loss of enthusiasm in work for nurses, rooting for another nurse replacement in lieu of resigned personnel.

2. Since there are nurses who are not ready to handle COVID-19 patients, it could be a small number of nurses but with a great help once fully trained in COVID-19 response. It is recommended for the hospital administrators and managers that all nurses should be well trained and must attend continuing professional development seminars and training to be kept updated on all the healthcare settings.

3. For future researchers, it is recommended to conduct another study with regards to fear, stress, and readiness in other health emergencies aside from COVID-19 pandemic. It could be helpful if this could also be done to other situations that may arise for healthcare system preparedness schemes.

REFERENCES

Ahorsu, D. K., & Griffiths, M. (n.d.). *Fear of Covid-19 Scale 2020*. 4.

Alfieri, C., Egrot, M., Desclaux, A., &S ams, K. (2022). Recognising Italy's mistakes in the public health response to COVID-19. *The Lancet*, 399(10322), 357–358.

Balay-odao, E. M., Alquwez, N., Inocian, E. P., & Alotaibi, R. S. (2021). Hospital preparedness, resilience, and psychological burden among clinical nurses in addressing the COVID-19 Crisis in Riyadh, Saudi Arabia. *Frontiers in Public Health*, 8, 943. https://doi.org/ 10.3389/fpubh.2020.573932

Barello, S., Palamenghi, L., & Graffigna, G. (2020). Burnout and somatic symptoms among frontline healthcare professionals at the peak of the Italian COVID-19 pandemic. *Psychiatry Research*, 290, 113129. https://doi.org/ 10.1016/j.psychres.2020.113129

Bartzik, M., Aust, F., & Peifer, C. (2021). Negative effects of the COVID-19 pandemic on nurses can be buffered by a sense of humor and appreciation. *BMC Nursing*, 20(1), 257. https://doi.org/ 10.1186/s12912-021-00770-5

Cohen, S. (n.d.). *PERCEIVED STRESS SCALE*. 2.

Coronavirus. (n.d.). https://www.who.int/ health-topics/coronavirus#tab=tab_1

COVID-19 pandemic in Western Visayas. (2021). In *Wikipedia*. https://en. wikipedia. org/w/ index.php?title=COVID-19_pandemic_ in_Western_Visayas&oldid=1059421795

Definition of FEAR. (n.d.). https://www.merriam-webster. com/ dictionary/fear

Fernandez, R., Lord, H., Halcomb, E., Moxham, L., Middleton, R., Alananzeh, I., et al. (2020). Implications for COVID-19: a systematic review of nurses' experiences of working in acute care hospital settings during a respiratory pandemic. *Int. J. Nurs. Stud*. 111:103637. doi: 10.1016/j.ijnurstu.2020.103637

Fritscher, Lisa. (n.d.). *The Psychology behind fear*. Verywell mind. https://www. verywellmind. com/the-psychology-of-fear-2671696

Galletta, M., Piras, I., Finco, G., Meloni, F., D'Aloja, E., Contu, P., Campagna, M., & Portoghese, I. (2021). Worries, preparedness, and perceived impact of Covid-19 pandemic on nurses' mental health. *Frontiers in Public Health*, 9. https://www. frontiersin.org/article/ 10.3389/fpubh.2021.566700

Goh, Y. S., Ow Yong, Q., Chen, T. H., Ho, S., Chee, Y., and Chee, T. T. (2021). The impact of COVID-19 on nurses working in a University Health System in Singapore: a qualitative descriptive study. *Int. J. Mental Health Nurs*. 30, 643–652. doi: 10.1111/inm.12826

Hu, D., Kong, Y., Li, W., Han, Q., Zhang, X., Zhu, L. X., Wan, S. W., Liu, Z., Shen, Q., Yang, J., He, H.-G., & Zhu, J. (2020). Frontline nurses' burnout, anxiety, depression, and fear statuses and their associated factors during the COVID-19 outbreak in Wuhan, China: A large-scale cross-sectional study. *EClinicalMedicine*, 24. https://doi.org/10.1016/ j.eclinm.2020.100424

Karger, A., Werneck de Carvalho, L. E., Fonseca, F. L. A., Feder, D., do Nascimento, V. B., Adami, F., &Tanisaka, L. S. (2022). Stroke hospital admissions during the COVID-19 outbreak in São Paulo, Brazil. *Cerebrovascular Diseases (Basel, Switzerland)*, 1–4. https://doi.org/ 10.1159/000521794

Lee, E. S., Tan, S. Y., Lee, P. S. S., Koh, H. L., Soon, S. W. W., Sim, K., Tang, W. E., & Chong, P.-N. (2022). Perceived stress and associated factors among healthcare workers in a primary healthcare setting: The Psychological Readiness and Occupational Training Enhancement during COVID-19 Time (PROTECT) study. *Singapore Medical Journal*, 63(1), 20–27. https://doi.org/10.11622/smedj.2020163

Lindell, M. K., & Perry, R. W. (2012). The Protective Action Decision Model: Theoretical modifications and additional evidence: The Protective Action Decision Model. *Risk Analysis*, 32(4), 616–632. https://doi.org/ 10.1111/j.1539-6924.2011.01647.x

Liu, Q., Luo, D., Haase, J. E., Guo, Q., Wang, X. Q., Liu, S., Xia, L., Liu, Z., Yang, J., & Yang, B. X. (2020). The experiences of health-care providers during the COVID-19 crisis in China: A qualitative study. *The Lancet Global Health*, 8(6), e790–e798. https://doi.org/ 10.1016/S2214-109X(20)30204-7

Mamon, S. & Lena, P. (n.d.). *Iloilo Province to hire nurses, medical doctors*. https://www.pna. gov.ph/articles/1151818

Mersha, A., Shibiru, S., Girma, M., Ayele, G., Bante, A., Kassa, M., Abebe, S., &Shewangizaw, M. (2021). Perceived barriers to the practice of preventive measures for COVID-19 pandemic among health professionals in public health facilities of the Gamo zone, southern Ethiopia: A phenomenological study. *BMC Public Health*, 21(1), 199. https://doi.org/10.1186/s12889-021-10256-3

Sam, N. M. S. (2013). *What is readiness? Definition of readiness (Psychology Dictionary)*. https:// psychologydictionary.org/readiness/

Nurses on the Frontline against the COVID-19 Pandemic: An integrative review—full text— *Dubai Medical Journal 2020, Vol. 3, No. 3— Karger Publishers*. (n.d.). https://www. karger. com/Article/Fulltext/ 509361

Penwell-Waines, L., Goodworth, M.-C. R., Casillas, R. S., Rahn, R., & Stepleman, L. (2016). Perceptions of caregiver distress, health behaviors, and provider health-promoting communication and their relationship to stress management in MS caregivers. *Health Communication*, 31(4), 478–484. https://doi.org/ 10.1080/ 10410236. 2014.967909

Perceived stress scale.pdf. (2020). https://das.nh.gov/wellness/docs/percieved% 20stress%20scale.pdf

Philippines: WHO Coronavirus Disease (COVID-19) Dashboard with Vaccination Data. (n.d.). https://covid19.who.int

Polit, D. F., & Beck, C. T. *(2012). What does Cronbach's alpha mean?* https://stats.oarc. ucla.edu/spss/faq/ what-does-cronbachs-alpha-mean/

Raosoft (2004) Raosoft Sample Size Calculator. Raosoft, Inc., Seattle. http://www.raosoft. com/samplesize.html

Readiness Definition & Meaning—Merriam-Webster. (n.d.). https://www.merriam-webster.com/ dictionary/readiness

Sample Size Calculator by Raosoft, Inc. (n.d.). http://www. raosoft.com/ samplesize.html

The Psychology behind Fear. (n.d.). Verywell mind. https://www. verywellmind. com/the-psychology-of-fear-2671696

WHO Coronavirus (COVID-19) Dashboard. (n.d.). https://covid19.who.int

Zhu, Z., Lian, X., Su, X., Wu, W., Marraro, G. A., & Zeng, Y. (2020). From SARS and MERS to COVID-19: A brief summary and comparison of severe acute respiratory infections caused by three highly pathogenic human coronaviruses. *Respiratory Research*, *21*(1), 224. https://doi.org/10.1186/s12931-020-01479-w

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