Impact of Staffing Pattern during COVID–19 Pandemic among Nurses

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Abstract – This study aimed to determine the impact of staffing pattern during Covid – 19 Pandemic among nurses. Specifically, it identified the different staffing patterns utilized by the hospitals during COVID – 19; determined the impact of changes in staffing pattern on nurses in terms of physical, psychological and social factors; identified different coping mechanisms utilized by the nurses and proposed a program for nurses that can be utilized in the present situation and for possible disease outbreak in the future. A descriptive non – experimental research design was used in this study. A survey questionnaire was answered by 100 nurses from private hospitals in Batangas City. The study shows that nurses experienced several health problems related to wearing of personal protective equipment for long hours. In addition, they are limited from participating in outdoor activities. In coping strategies, nurses utilized their free time as a leisure time to relax their mind and body.

Keywords – Covid -19 pandemic, staffing pattern, nurses

INTRODUCTION

Nursing has traditionally played a significant role in defining the quality of hospital care and the type of patient outcomes. They are important in the health care delivery system and appropriate nurse staffing is essential for providing safe and high–quality care that affects patient outcomes. Typically, staffing is often a day-to-day activity in which designated individual assess and establish the shift-to-shift ratio of nurses to patients in order to ensure proper staffing on each unit and shift [1]. The standard nurse – patient ratio according to the Department of health is 1:12 in private hospitals. However, with an increasing number of critical patients tested positive for COVID - 19, the demand for front liners also increases as well as the patients handled by each nurse. During the pre-pandemic, the health care system in the Philippines was already facing problems when it comes to availability of health facilities and health workers especially nurses. The standard nurse – patient ratio was not followed due to lack of nurses, because most of the nurses after years of experience in some hospitals decided to work in other country. Since there is already a shortage of nurses in the Philippines, there has been a change in the staffing pattern in different hospitals both public and private. "Staffing pattern is defined as the number and mix of nursing personnel that should be on duty each unit every shift and day." There are different types of staffing pattern which include traditional fixed staffing pattern, controlled variable, and semi – flexible staffing pattern.

Most nurses are working for an entire 24 – hour day and have an increased workload. As hospitals cope with the shortage of registered nurses in the Philippines, the current staffing pattern requires the nurses to work for longer hours. Staffing pattern that has imbalanced nurse – patient ratio could have a negative effect to nurses. According to a study, nurses who work 12-hour shifts or work overtime had lower nursing quality and patient safety [2]. And in addition to delivering clinical nursing, nurses caring for COVID-19 patients locally and internationally provide primary nursing care which raises their workload and risk for acquiring the virus. Increased workloads, in turn, may lead to increased stress at work, morbidity and mortality of patients, and the incidence of adverse effects and prolonged hospitalization of patients. Longer shifts, on the other hand, put nurses at a higher risk of mental or physical exhaustion, increased stress, and poor job performance and quality of care. The impact of changes in staffing pattern to nurses worsens their negative experiences and needs to be addressed.

As students and researchers, this topic was chosen to determine how the changes in staffing pattern affect the well – being of nurses during the COVID–19 pandemic. This research was also conducted to benefit

the subject of the study (nurses) through providing a program that can be utilized to improve the condition of the nurse staffing in hospitals and to address the current situation of nurses during this time of pandemic.

OBJECTIVES OF THE STUDY

This study aims to determine the impact of staffing pattern among nurses during Covid – 19 Pandemic. Specifically, it will identify the different staffing patterns utilized by the hospitals during COVID – 19; determine the impact of changes in staffing pattern to nurses in terms of physical, psychological and social factors; identify different coping mechanisms utilized by the nurses and propose a program for nurses that can be utilized in the present situation and for possible disease outbreak in the future.

MATERIALS AND METHODS

The researchers utilized a descriptive non – non-experimental research design in determining the impact of staffing patterns among nurses during the COVID-19 pandemic. Descriptive research design includes the use of survey questionnaires, interviews, and observations to describe a phenomenon.

Participants

The respondents of the study consisted of 100 nurses from private hospitals in Batangas City who are currently working under Covid-19 pandemic. The researchers utilized a nonprobability sampling technique, which includes snowball sampling or chain–referral sampling and quota sampling. This method allowed the respondents to recruit other respondents for a test or study. Quota sampling was used wherein the researchers selected a specific number of respondents. Considering the COVID–19 Pandemic, this is an appropriate method since it will be an online survey via google forms. The respondents can easily forward the link to other respondents suitable for the study.

Instrument

A survey method was used to collect data through questionnaires. According to Polit and Beck (2022), the advantage of this method is that it is less expensive, permits anonymity, and may result in more honest responses. Another advantage is that the researchers do not have to be present thus, eliminating bias due to phrasing questions differently for different respondents. The instrument passed through a reliability and validation process by the statistician. It

consists of three parts, in which specified statements in the questionnaires were rated by the respondents from Strongly agree to Strongly Disagree. The first part is about the effect of changes in staffing pattern among nurses during Covid – 19 pandemic. The second part is about the impact of changes in staffing pattern to nurses in terms of physical, social, and psychological factors. The last part is about the different coping strategies of nurses during Covid-19 pandemic.

Procedure

The researchers utilized articles, books, journals and the internet to identify relevant information related to the study. In addition, they created a self-made questionnaire based on the studies in the related literature that was checked and validated by the adviser and panelists. The researchers also asked for permission to conduct the study to the College Dean, and respondents to cooperate in the study. The researchers also explained the process to the respondents and distributed the questionnaires to gather data. The questionnaires were retrieved after all the respondents have stipulated their answers. The data gathered were weighted and interpreted.

Data Analysis

After the collection of the questionnaire, the answers were tallied and analyzed to better present and interpret the gathered data. After the answers to the survey question have been recorded, different statistical treatment was used. To determine the assessment of the respondents towards the impact of staffing pattern during Covid-19 pandemic, a four-point Likert Scale was utilized. Answers were statistically treated using weighted mean and ranking to show the level of understanding. The given scales were used to interpret the result of the data gathered: 3.50 – 4.00 – Strongly Agree (SA) and Always (A); 2.50 – 3.49 – Agree (A) and Often (O); 1.50 – 2.49 – Moderately Agree (MA) and Sometimes (S); 1.00 – 1.49 – Disagree (D) and Never (N).

Statistical Treatment of Data

The data that were gathered in the study were treated with statistical tools specifically ranking, weighted mean and composite mean. The ranking is a type of statistical tool was used to show the relative position of the answers from the data collected from the respondents. It will determine which among the indicators ranked the highest and lowest. On the other hand, weighted mean was used to determine the overall

average of the responses gathered from the respondents regarding the impact of staffing pattern to nurses and utilization of different coping strategies during the pandemic. Meanwhile, the composite mean pertains to the composite measure of the variables. Pearson Correlation was also used for determining the statistical linear relationship between two continuous variables.

Ethical Consideration

The ethical element of the research was observed and considered to protect the respondents of the study and the institution involved. A letter of informed consent was sent through messenger to the respondents that were involved in the study to request for participation. The full consent consisting of the purpose of the study without any disclosure and concealment was obtained from the respondents prior to the study. The researchers were instilled with the important ethical principles in conducting a research and respect for human dignity is the priority. A survey questionnaire will be utilized ensuring an adequate level of confidentiality of the research data as well as the anonymity of the respondents and institution involved. The study also passed the Ethics review committee of Lyceum of the Philippines University. Moreover, the right of the respondents to withdraw from the study or refuse to give information was considered.

RESULTS AND DISCUSSION

Table 1
Impact of Changes in Staffing Pattern: Physical

Indicators	Weighted Mean	Verbal Interpretation	…	Rank
Main channel	Channel 1	Channel 2	…	Channel c
Assistant channel	Channel 2	Channel 3	…	Channel 1

Table 1 displays the impact of changes in staffing pattern to nurses in terms of physical factors during COVID-19 pandemic among nurses. The composite mean of 2.97 indicates moderate extent of the respondents on the above measures which shows physical impact of COVID-19 to nurses results equally from wearing of PPE for longer hours that cause skin damages to nurses in the hospital. One of the negative effects that will not benefit nurses especially in this time of pandemic is due to long hours of wearing PPE and the exhausted feeling that they experience that sometimes was not able to apply quality of care they

had to give to some patients. With the increasing number of COVID-19 cases, nurse had to spend most of their time in the hospital and attending to personal needs was not their priority and sometimes forget it, but that doesn't conclude that they do not attend to their basic needs as a person. However, though nurses experience the things they can't control of being a front-liner, they still able to see this as an advantage that they boost their productivity and done new set of routines that can enhance the quality care given to a huge amount of patient inside the hospital.

Among the items mentioned, due to the scarcity of nurses they not only work long hours in isolation wards, but also wear protective gear for 8- to 12-hr shifts, causing dehydration and pain got the highest weighted mean score of 3.36. Nurses are one of the front liners providing care for patients during this time of pandemic. More importantly, there is also a shortage of nurses in the Philippines which makes it more challenging. Due to growing number of cases of Covid – 19, workload of nurses have also increased especially in isolation wards. Thus, nurses will have to wear protective equipment for extended periods resulting to several health problems such as dehydration and pain. Attitudes and beliefs of nurse to comply in wearing PPE during COVID-19 is essential in the work environment that they know they are risk in acquiring the virus, and that the said barrier between nurse and patient sometimes result in physical exhaustion and decrease compliance of patient care. According to Gainnis and Goropolous et al. [3], the unmatched high requirement for protective gear, protective masks, nurse and physician's clothing, gloves, and eye-to-face protective gears, give rise to a serious threat. The huge increase of workload has a negative impact on health care professionals' physical and mental health, and that this stressful situation is combined with the accumulated fatigue and had significant impact on work and personal life.

Items that followed are nurses experiencing some skin damage due to prolonged use of PPE with a weighted mean of 3.24. There are different significant problems that can arise in prolonged use of PPE, especially skin damage like lesions and rashes due to pressure and friction of prolonged use of PPE. In relation to the study of Shaukat, Ali and Razzak [4], extended working time, and functioning in a precarious department, a shortage of PPE, confirmed family members in a COVID-19 , incompetent hand-hygiene, and inappropriate infection control measures were all identified health risks. That dryness or tightness as well as depigmentation were most commonly reported

side effects, and they were linked to more than six hours continuous PPE use.

Physical impact to nurses such as: COVID-19 pandemic boosts the productivity of nurses and manage new set of routines shows a weighted mean of 3.13. Nurses' productivity was increase as they had to meet the maximum care given to each patient. They had to do multiples task at a time as the cases of COVID-19 increases and the need of patient also increases. In order to cope with the needs of the patient, nurses had to make their own set of new routines and manage their time properly to do their nursing care to each patient. And as a front-liner, they are very eagerto end or make changes in the number of cases that they had to prioritize these things instead of attending to their personal needs. Nurses are frequently the first and highest-level provider for primary care. Most of the time, nurses are the primary and highest-level of care providers. They are essential to expanding delivery of health services to distant populations. Evidence suggests that nurses can be involved in health-care efficiency and patient outcomes, and they are inexpensive to train and deploy than other full-time health workers.

However, things to consider like not having enough time to attend to their basic need (2.65), they have enough time to take a minute rest during shifting hours (2.58), and have enough time to pamper themselves (2.55) got the lowest rank and rated the least, somehow indicates of not prioritizing their personal needs. As the COVID-19 surged, nurses need to stay longer hours in the hospital giving quality of care. Having time to pamper or unwind was beyond their time as they feel exhausted and take their free time to just rest in order to regain their energy for the next shift hours. Shifting hours of nurses in this time of pandemic is very demanding as the physical presence of nurses is need in the bedside of the patient. Regarding to that situation nurses has no enough time to take rest that may cause burn out or exhaustion as it affects the inability to go along in workloads. Similar to the study of Kniffin, Narayanan and Vugt et al., [5], they have found that strong human connections, even the formal and informal sharing of information among their coworkers are essential to physical and psychological health of a person. As Gainnis and Goropolous et al., [3] said, due to increased workload, there is no enough time for personal care, unwinding, and even basic necessities such as eating nutritious food and personal sanitation.

Table 2
Impact of Changes in Staffing Pattern: Social

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Physical distances between co-workers may reduce aid behavior in the near term especially in helping each other.	2.89	Moderate Extent	2.5
2. I can communicate efficiently inside the facility and prepare for relevant external communications related to COVID-19.	2.89	Moderate Extent	2.5
3. I have plenty of time to spend with my family.	2.22	Moderate Extent	10
4. I am able to communicate well with the patient.	2.73	Moderate Extent	4
5. My shifting hours is a burden in communicating with other people.	2.55	Moderate Extent	7
6. I am limited from participating in outdoors activities.	3.02	Moderate Extent	1
7. I experienced getting too attached with my patient.	2.36	Least Extent	9
8. My workload changes on how I communicate with other people.	2.71	Moderate Extent	5
9. I am being avoided in public places.	2.55	Moderate Extent	7
10. I have inadequate time to do health teaching to the patients.	2.60	Moderate Extent	6
Composite Mean	**2.65**	**Moderate Extent**	

Legend: 3.50 – 4.00 = Great Extent; 2.50 – 3.49 = Moderate Extent; 1.50 – 2.49 = Least Extent; 1.00 – 1.49 = Not at All

Table 2 shows the Impact of changes in staffing pattern to nurses in terms of social factors during COVID-19 pandemic among nurses. It displays a

weighted mean of 2.65 which indicates Moderate Extent of the respondent in the said indicators. Nurses limit their time spending social activities outdoors as it

gives threat the society and to the person inside the hospital as well. With the amount of time given to each patient, nurses were able to build good therapeutic communication that builds a good caring environment. However, giving much attention and time to each patient can lead to building a personal emotional connection that led to an emotional distress to both patient and nurses. As their time in the hospital adjusted during this COVID-19 pandemic, they sometimes do not have much time to spend with their families.

Among the things mentioned were nurses are limited of participating outdoor activities who got the highest weighted mean of 3.02. In this this time of pandemic who is working in a medical field, who might be the carrier of the said virus gives a biggest threat to a nurse itself because of their family as well as to the society. Being a front-liner during this COVID-19, nurses faced the stigma of the first caused of portal of entry as they are the "front-liner" in giving care to patients. People in the society gets anxiety of being around the medical front-liner with the thinking of being a carrier of the said virus that they can pass to one another. That is mentioned in the study of Gainnis and Goropolous et al., [3] the huge increase in workload, staff shortages, risk of dissemination, and lack of supplies has a negative impact on healthcare professionals' psychological and physical well-being and put extreme strain on healthcare systems.

It is followed that physical distances between co-workers may reduce aid behavior in the near term especially in helping each other and can communicate efficiently inside the facility and prepare for relevant external communications related to COVID-19 with a weighted mean of 2.89. Physical distancing demands a great compliance especially inside the hospital as it affects the relationship between nurses to nurses if they were about to help each other but somehow able to just verbally and the use of signs to help each other in this time of pandemic. While according to Flynn et al., [6] , physical distances between health care providers may reduce aid behavior in the couple term, that people should be more proud in seeking for help from others as people are more prepared to throw hands in helping and give best-quality assistance more than they usually assume, perhaps mostly during conflicts.

It is followed by nurses are able to communicate well with the patient with a weighted mean of 2.73. For some reasons, nurses feel exhausted during the entire shifting hours of their duty, but they still be able to communicate well but somehow still be affected as they communicate with the patient in this time of pandemic as they show compassion with the patient

especially to those who are experiencing the current virus. According to the study of Mak and Kozlowski [7] online teams has lacked in the same level of sharing information as person-to-person teams, and that conventional teamwork issues like disagreement and collaboration can quickly increase across virtual teams.

Meanwhile, having plenty of time to spend in their family with a weighted mean of (2.22), they get too attached to their patient (2.36), and their shifting hours is a burden in communicating with other people and being avoided in public places (2.55) got the least rank on the indicators provided. Spending their time in the hospital during their shift and having lots of workload cause great exhaustion and requires them spend their spare time on resting for them to use their energy on the next shift and result of not having enough time to bond with their families. In addition, getting personal communication got the least rank shows that, some nurses still follow the proper giving of care and treat patient with emphatic not with sympathy as they set boundaries of giving emotions to each patient. Communicating is not totally a burden to some nurses as this shows as their choice of not spending time to cope with their emotional or physical distress. As a front-liner, sometimes they are being avoided in public places, if they personally know that a person is a nurse but most of the time people still get that anxiety around a front-liner. Also in relation to the study of Gainnis and Goropolous et al., [3] this stressful situation, combined with the accumulated fatigue, has had a significant impact on work and personal life. Due to increased workload, there is no enough time for personal care, unwinding, and even basic necessities such as eating nutritious food and personal sanitation.

Table 3 illustrates the impact of changes in staffing pattern to nurses in terms of psychological during covid-19 pandemic among nurses. It displays a composite mean of 2.91 which demonstrates moderate extent of nurses in the said indicators. During COVID-19, nurses are mostly affected emotionally, as they become overwhelmed with what is happening around the hospital even in society. So, emotional and physical support is very essential to them as they battle the COVID-19 pandemic. But being a front-liner for the society also in the family, it gives them anxiety as they might transfer the different diseases to them. Effects on the mental health of nurses was mentioned above as this factor is the common and most concern and issue of each front-line nurses. Nurse's mental health was threatened during COVID-19 but somehow help nurses in attending the needs of patient more.

Table 3
Impact of Changes in Staffing Pattern: Psychological

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I sometimes feel the psychological distress (e.g. sleep disturbances, loss of self-confidence and inability to make decisions)	3.15	Moderate Extent	6
2. I am not able to provide quality or satisfying care to the patient due to workload and stress.	2.35	Least Extent	12
3. I experience of being an obsessive-compulsive symptom (e.g. you are being anxious that you might got the disease after your working hours)	3.02	Moderate Extent	7
4. I am too scary to make a failure.	3.40	Moderate Extent	3
5. I do not have enough peace of mind.	2.53	Moderate Extent	11
6. There is a risk of medication error or does miscalculation.	2.44	Moderate Extent	12
7. I fail to perform task assigned on time.	1.84	Least Extent	13
8. Spending hours with my patient changes my perception in life.	2.85	Moderate Extent	8
9. I am more attentive or alert on my nursing responsibilities	3.20	Moderate Extent	5
10. I feared in transmitting the disease to your family members.	3.73	Great Extent	2
11. I feel fulfilled in giving patient in this time of pandemic.	3.29	Moderate Extent	4
12. Social support and family support on psychological health is important in this current situation (COVID-19 Pandemic)	3.78	Great Extent	1
13. I sometimes feel isolated that it affects my anger or irritability.	2.56	Moderate Extent	10
14. Physical distancing affects my mental health.	2.64	Moderate Extent	9
Composite Mean	2.91	Moderate Extent	

Legend: 3.50 – 4.00 = Great Extent; 2.50 – 3.49 = Moderate Extent; 1.50 – 2.49 = Least Extent; 1.00 – 1.49 = Not at All

In relation to the given indicators, social support and family support on psychological health is important in this current situation (COVID-19 Pandemic) got the highest rank with a weighted mean of 3.78. During this time of pandemic, family support is very important to everyone especially to nurses who is one of the front liner against the virus, as family is there to guide and understand that if anyone is having a hard time having this pandemic so is the nurses and other medical front liners, as they are the one who took care those patients personally in the hospital. The study of Hamaideh, [8]; Kutluturkan, Sozeri, Uysal, & Bay, [9] and Cañadas-De la Fuente et al., [10], mentioned that social and family support have been shown to have a positive impact on the psychological health.

It is followed by having fear of transmitting the disease to your family members with a weighted mean of 3.73. Number one fear of every medical front liner is acquiring virus upon their duty in the hospital not just that but also transmitting the disease coming from the hospital to each member of the family. That is mentioned in the study of Gainnis and Goropolous et al., [3] that huge increase in workload, staff shortages, risk of transmission from person to person for staying longer hours than usual inside the hospital.

Nurses are very scared to make a failure with a weighted mean of 3.40. Due to increasing number of patients during COVID-19, they have lots of workload in their plate whenever they are in the hospital. In relation to that nurses advocate themselves as the one who gives quality of care to the ill as the number of workload leads to exhaustion and may lead to anxiety. Overview of Lindebaum, Geddes, and Jordan's research [11] stated in their study that the crossing of remote work and a global problem, for example, questions arises about how feelings like anxiety and emotional tension can best be shared and continued in

a special setting of online interconnected effort with restricted social and mental cues.

However, there is a risk of medication error or does miscalculation (2.35) they are not able to provide quality or satisfying care to the patient due to workload and stress (2.44) and they fail to perform task assigned on time (1.84) got lowest rank of the least rank. As indicators mentioned above as the least rank, technically it is concluded that despite all the emotional distress each nurses face they still able and will do to give quality of care to each patient with the COVID-19 pandemic. Some nurses who endure lots of workload may encounter stress and do not have enough peace of mind as they overthink everything about what is happening. And in relation of not having enough peace of mind some nurses' is bothered on the quality of patient care that they are giving to the patient due to stress and the amount of workloads. And according to Nei, Master and Su et al., [12] psychological distress, such as sleep disturbances, loss of self-confidence and inability to make decisions as well as physical health issues have been reported in frontline nurses. Furthermore, in the study of Liu et al., [13] poor mental health among nurses may not harm only individuals but also professional performance and as a result, nursing patient quality.

This indicates that the respondents disagree with the items cited. In order to perform well, nurses should be able to maintain their health and well – being despite of the heavy workload and shortage of nurses during this pandemic. Having a sufficient sleep is important for healthcare providers especially nurses for them to be concentrated and productive during their duty hours. According to Erickson [14], nurses on night shifts and those who worked more than 12 hours or longer are at risk for decline in neurocognitive performance. On the other hand, nurses should know the ten rights of giving medication which include right patient, right drug, right dose, right route, right time and frequency, right documentation, right history and assessment, right to refuse, right drug – drug interaction and right education and information. These should be practiced by all nurses to avoid mistakes. Some studies show relationship between nurse staffing and medication error. Loan and Patrician et al. [15] stated that medication error usually occur during shifts where there are only few nurses on duty.

Some factors that could cause medication error include increase workload, long working hours and medications that look alike. Nurses are performing many tasks in the clinical area such as giving medications, monitoring the patients, and providing their health needs. Despite their heavy workload, they remain efficient and make sure that they give the quality of care needed by the patients. Lastly, performing task on the right time is necessary to allow nurses provide proper care for their patients. According to Haddad, Doherty and Purtilo [16], nurses are responsible for the quality of their work and for carrying out the task that have been assigned to them. Effective time management is needed to accomplish their task on time and can improve their skills on the clinical area.

Table 4
Summary Table on the Impact of Changes in Staffing Pattern to Nurses

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Physical	2.97	Moderate Extent	1
2. Social	2.65	Moderate Extent	3
3. Psychological	2.91	Moderate Extent	2
Composite Mean	**2.84**	**Moderate Extent**	

Legend: 3.50 – 4.00 = Great Extent; 2.50 – 3.49 = Moderate Extent; 1.50 – 2.49 = Least Extent; 1.00 – 1.49 = Not at All

Table 4 demonstrates the summary table on the impact of changes in staffing pattern to patient care during covid-19 pandemic among nurses. It shows a composite mean of 2.84 which indicates moderate extent to the categories of measures to nurses. Among all medical front liners, nurses have a long term and close contact to with patient suspected or with COVID-19. Impact in the psychological among nurses during COVID-19 pandemic got the highest rank with a weighted mean of 2.91. Psychological has great impact of anyone's mental health if they are dealing of something serious like for example this pandemic. Psychological impact in nurses in this time of pandemic is different from other previous diseases, as they were being stigmatized whenever they go to public places as people think they might be a carrier.

Impact in physical aspect among nurses during COVID-19 Pandemic with a weighted mean of 2.97

took the second rank. Physical exhaustion is one of the most common complain of nurses during this time of pandemic. With an increasing number of cases, nurses tend to spend more of their time on the hospital giving quality care to patient, as a result in neglect of attending to their physical or basic needs and sometimes results in decrease quality of patient care. Griffiths et al., [2] state in their study that, nurses who work 12-hour shifts and those who work overtime show low nursing efficiency and quality care.

Finally, the impact in social aspect during COVID-19 pandemic among nurses is researched. Physical distancing has great impact in patient care inside the hospital as social interactions are limited especially among healthcare workers. As workload of nurses increases in this time of pandemic, the social interaction of nurses to nurses decreases. In relation to

the decreased social interaction of nurses to another, they tend to be more irritated as they prefer not to talk. Social interaction of nurse-patient relationship is affected also in a way of relaying emotions of the nurse to patient is misunderstood in giving patient care. Gainnis and Goropolous et al. [3] include in their study that due to increased workload, there is no enough time for personal care, unwinding, and even basic necessities such as eating nutritious food and personal sanitation and social interactions are limited among healthcare workers, and that applying social distances is hard. Hospital rounds, interactional cases, and lunch times all take place in cramped spaces where walking long distances is hardly possible. Loneliness and self-sacrifice can lead in irritability, madness, and temper changes.

Table 5
Different Coping Strategies of Nurses during Covid-19 Pandemic

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. I use meditation techniques as a coping strategy during Covid-19 pandemic.	3.11	Often	5
2. I use self-management techniques as a coping strategy during Covid-19 pandemic.	3.25	Often	3
3. I attend psychological wellness counseling offered by hospital	2.58	Often	7
4. I share my work experience with my significant others as a means of coping mechanism	3.15	Often	4
5. I use my free time as a leisure time to relax my mind and body.	3.60	Often	1
6. Social interaction has become an important coping skill for me during the Covid – 19 Pandemic	3.37	Often	2
7. I maintain an adequate sleep to perform well during Covid-19	2.85	Often	6
Composite mean	**3.13**	**Often**	

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

Table 5 displays the different coping strategies of nurses during Covid-19 pandemic. The composite mean of 3.13 indicates that respondents often used coping strategies listed on the above indicators. Coping strategies are important in helping nurses deal with stressful situations like the pandemic but there are also some factors that prevent nurses from doing some coping strategies. The weighted mean of 3.60 indicates that the respondent's coping strategy on changes in staffing pattern and longer working hours is using their free time as a leisure time to relax their mind and body.

It is followed by social interaction has become an important coping skill for them during the Covid – 19 pandemic with a weighted mean of 3.37. These coping strategies can be very helpful in maintaining mental wellness of nurses and as a means of detoxication during this pandemic. As per Zhang et al. [17], utilizing the COVID precautionary measures, being updated on recent news about COVID-19, actively learning professional knowledge, changing one's perception and taking an optimistic approach to the COVID-19 pandemic; and interpersonal communication with

family and friends were the highest five common strategies listed by participants to deal with stress.

Furthermore, using self-management techniques as a coping strategy during Covid-19 pandemic with a weighted mean of 3.25 occupies the third rank. The use of self-management techniques and other coping strategies during this pandemic are vital in order to maintain high quality nursing care and handle the stressing situations in the hospital on a daily basis. These were supported by the study conducted by Hoedl et al., [18] that increasing fluid intake, having a balanced diet, taking supplements such as multivitamins, and essential minerals were displayed as coping strategies on staying fit and active, away from any illness and infections and also contribute in maintaining one's physical and mental wellbeing during Covid-19 pandemic.

At rank 4 with a weighted mean of 3.15, the result shows that respondents often use sharing of work experience with their significant others as a means of coping mechanism. Having interpersonal communications with significant others will be very helpful and can also be used as a means of detoxication to the daily challenges nurses are experiencing in the field. These were clearly supported by the study conducted by Finlay et al. [19] which explained that keeping in contact with others, both virtually and face to face, was a typical coping strategy done by healthcare professionals. Chatting, Zoom Calls and even sharing and mentioning friends in social media (including Facebook, Instagram and Twitter), updating friends by sending pictures of what's currently going on with your life, and having a gaming night with your friends were all mentioned as ways to extend interaction.

Moreover, at rank 5 with a weighted mean of 3.11, results show that respondents often use meditation techniques as a coping strategy during Covid-19 pandemic. Sticking with the coping strategies that worked well pre-Covid are the best coping strategies you can utilize because at some point before this pandemic, you used it to cope and adapt through stressful situations and proven by you to be effective and helpful. And if it is practicing meditation, then use it as coping strategy. Finlay et al. [19] explained that meditation, patience training, and applying cool, calm and collected personality through unfavorable situations, as well as utilizing deep breathing exercises, were all used to help lower or even relieve stress. Listening to Podcasts, audiobooks, and music were all listed as a source of meditation and mindfulness. The cognitive coping mechanisms of focusing on what is in

front of you and regard your worries on what will happen tomorrow were highly regarded.

With the weighted mean of 2.85, standing at rank 6, results show that respondents often maintain an adequate sleep to perform well during Covid-19 pandemic. Having adequate rest is detrimental in performing well in just every profession you are in. Maintaining a sleep of 7 to 8 hours will allow a nurse to work more efficiently and effectively, resulting in increased productivity and saves time in the long term. These claims where supported by the study conducted Boheji, [19] which she explained that sleep and high-quality work performance are inextricably linked. Health, well-being, and productivity all increase once enough sleep is acquired. It aids the body's physical recuperation. The body tissues mend and strengthen as one sleeps. It also aids within the improvement of mental state, mood, and cognitive performance. The nurse shall feel refreshed and rejuvenated if she gets adequate amount and quality sleep. The brain generates and maintains memory-forming and memory-retention connections while sleeping that enables to be more attentive and alert on duty.

At rank 7 with the lowest weighted mean of 2.58, results show that respondents often attend psychological wellness counseling offered by hospital. Conducting variety of psychological support enables nurses to be resilient and maintain high morale in doing their jobs. As per New York University, [20] more workplace support, improved physician-nurse work ties, and access to hospital services were all linked to lower anxiety and depression (e.g., adequate personal protective equipment, or PPE) on healthcare professionals. While those with organizational pressures tends had higher levels of hysteria and depression. By understanding the causes that result in stress, depression, and anxiety, still as developing tools to alleviate these factors, hospitals will allow their workforce to make and maintain resiliency. this is often especially important during times of crisis.

CONCLUSION AND RECOMMENDATION

Different staffing pattern utilized by the hospitals in Batangas City is not balanced even before pandemic due to shortage of nurses in the Philippines. Changes in staffing pattern during Covid – 19 pandemic have a negative impact to the physical, social and psychological well – being of the nurses as it affects their working conditions. Nurses often utilized different coping strategies in belief that it preserves their physical and mental wellbeing during

stressful situations. The researchers proposed a program for nurses that can be utilized in the present situation and for possible disease outbreak in the future.

Utilization of telemedicine and online consultations to lessen the number of patients going to the hospital specially those who were not critically ill. This will also lessen the transmission of virus between patients and health workers. The proposed program for nurses may be discussed and considered for further implementation and evaluation thereafter.

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