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'Should I stay or should I go?': A mixed methods study on nurse retention during challenging times

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Abstract

Background: The World Health Organization estimates that between 80,000 and 180,000 medical personnel perished as a result of COVID-19. Although studies about nurses' organizational commitment during the COVID-19 pandemic have been conducted, the sources of motivations and resilience strategies of nurses in providing a quality healthcare service amidst the COVID-19 pandemic have yet to be explored.

Objective: This study aimed to investigate how motivation and resilience influence nurses to serve and cater to patients during the COVID-19 pandemic.

Methods: A sequential exploratory mixed approach was used in this study between July and August 2022. The Connor-Davidson Resilience Scale (CD-RISC-10), Work Extrinsic and Intrinsic Motivations scale (WEIMS), and Garbee and Killacky's Intent to Stay Scale (GKISS) were used to measure resilience, motivation, and intention to stay, among 50 nurses within Metro Manila. Quantitative data were analyzed using quantile regression, while qualitative data from eight participants were analyzed using thematic analysis.

Results: The majority of the nurses were working 12 hours and above (52%) and earning a bi-weekly income of PHP 15,001 to 20,000 (96%). The GKISS scores of most respondents indicated their likelihood of remaining in their current profession was moderately low (Mdn = 12.5; IQR = 12-14). It was also found that there was no sufficient statistical evidence to conclude that intention to stay was associated with resilience (p = 0.914) and work motivation (p = 0.560). The qualitative strand of this study explored the significant influences of motivation, resilience strategies, and sources of intention to stay among Filipino nurses while facing the COVID-19 pandemic. The primary motivations of nurses lie in family, passion for work, and career development, while the resilience strategies include adaptiveness, time management skills, and self-fulfillments. On the other hand, the intent to stay greatly lies in serving the people and the country.

Conclusion: This study concludes that positive and negative resilience and motivations from different facets of the social life of Filipino nurses, including passion, familial ties, patient care, and faith are the antecedents influencing the intention to serve in the healthcare service. In terms of staying for an extended period in a nursing career, the study found that institutionalized interventions, adequate compensation and benefits, and a good workplace are determinants of staying longer in the Philippines as Filipino nurses.

Keywords

humans; COVID-19; motivation; pandemics; Philippines; health personnel; nurses

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Background

Two years after the first COVID-19 outbreak in Wuhan, China, the virus has become one of the most significant pandemics in history. Coronavirus 2 causes severe acute respiratory illness (SARS-CoV-2). This condition causes a different sickness that ranges from asymptomatic to acute respiratory distress

syndrome necessitating ICU hospitalization (Nurmohamed et al., 2022). Furthermore, some early findings suggest that 60-80% of patients with severe COVID-19 symptoms appear a month after hospital discharge, accompanied by exhaustion and trouble breathing. Furthermore, the coronavirus sickness has severely harmed the lives of many people throughout the world since the World Health Organization declared it a pandemic in March 2020 (Ekström et al., 2021). COVID-19 is

transmitted from person to person by droplets or direct touch (Lai et al., 2020; Yang et al., 2020). Furthermore, contaminated droplets can be transferred 1-2 meters, deposited in the region, and remain alive for a few days under favorable air conditions. The body can absorb it by droplet inhalation, contact with contaminated surfaces, and touching the mouth, eyes, and nose with one's hands (Singhal, 2020).

Nurses have emerged as one of the vulnerable populations during the COVID-19 pandemic as they carry out their duty to the healthcare system (Ellis, 2020; Marzilli, 2021; Smith, 2020). World Health Organization (WHO) estimates that between 80 and 180 thousand healthcare workers died of COVID-19 (World Health Organization, 2021). According to Schwartz et al. (2020), due to vulnerability to disease and the spread of misinformation during the COVID-19 pandemic, these nurses have become susceptible to discrimination also. Despite that, they remained committed to fulfilling their chosen duty to the community.

Nursing is one of the most renowned healthcare professions, with many women working in it (Nazareno et al., 2021). Additionally, in response to the many health hazards, registered nurses play a crucial role in public health by providing direct patient care and being vulnerable to infectious diseases, workplace risks, and demanding work environments (Marzilli, 2021). Despite their numerous contributions and duties, they have been viewed in recent years as a less significant member of a clinical care group. Nurses continue to strive for more recognition and are currently gaining more respect and autonomy, having an excellent collaborative relationship with doctors and other healthcare professionals. also, because of less appreciation coming from their higher immediate supervisor, wrong coaching style, unprofessional surroundings, inadequate staffing, over workloads, and poor relationships among co-workers.

Several empirical studies about the organizational commitment of nurses during the COVID-19 pandemic have been conducted (Gayol & Lookingbill, 2022; Jun et al., 2021; Middleton et al., 2021). These studies consistently found that burnout and mental health issues were the most common reasons why some nurses leave nursing. But factors why many nurses stay despite health risks and discrimination during the COVID-19 pandemic have yet to be explored. This paper sought to fill that gap in the literature. The researchers investigated possible factors of nurses' intention to stay, such as motivation and resilience. It was hypothesized that retention would be positively associated with motivation and resilience.

Nurses' intention to stay has been an essential topic in organizational studies and requires immediate attention to determine how to motivate individuals to stay with an organization effectively. Nurses that are new to the field are more likely not able to affirm their abilities and can be easily discouraged, which has a significant influence on self and desire to stay (Laschinger et al., 2010). Intention to stay is the eagerness to remain employed and be mindful of their decisions following serious deliberation (Tett & Meyer, 1993). Most studies on nurses' intention to stay in long-term care have concentrated on job satisfaction. Therefore, nurses' reasons for choosing their workplace are a relatively new part of research on the intention to stay in long-term care (Kuo et al., 2014). Intention to continue in their existing employment connection with their current employer on a long-term basis is

defined as the "intention to stay" (Eketu & Ogbu Edeh PhD, 2015). An individual's commitment can be measured as an intent to stay with their organization and a desire to continue their tenure with the company (Hewitt Associates, 2004). Nurses are more likely to stay if they are happy at work. As a result, nursing administrators should work to provide a range of instructional programs (along with a "basic curriculum" that covers professional nursing knowledge, evidence-based nursing, quality management, and medical resource use).

In high-stress settings, nurses provide medical and emotional aid to patients through patient care and support. In these trying times, resilience is a virtue that helps one adapt. Resilience is a vital skill for nurses to help them cope with workplace pressures and keep them there longer (Chiang et al., 2021). Resilience can be thought of as both a process and a characteristic. American Psychological Association (2022) defines resilience as a process that helps people cope with difficult situations while maintaining their sense of optimism. A high risk of burnout exists for nurses regularly. They expected to face enormous expectations as part of their care responsibilities. Health institutions that provide them with the resources, skills, and equipment to meet those needs can lessen the likelihood of being forced to leave the profession. It accounts for people's ability to seek and use social support, improve self-perception, and accept their circumstances.

Individuals' ability to grow after a stressful event is also evaluated by resilience measures (Leys et al., 2020). Resilience is crucial for nurses because stress at work can affect their job satisfaction, staff turnover, hospital costs, and the quality of patient care, so they need to be able to deal with it. As they deal with stress, resilient nurses can change how they work and use their skills to deal with it well. According to Wei et al. (2019), nurses' resilience allows them to thrive in the face of workplace adversity. Even though there is a severe shortage of medical personnel and nurses in the Philippines, Filipino nurses have turned their tenacity into strength. Resilience is a stable trajectory of normal functioning following a traumatic event (Southwick et al., 2014).

In the medical field, motivation may significantly impact a healthcare worker's performance if it is low rather than a lack of knowledge and skills. Negussie and Oliksa (2020) define motivation as the individual's desire to respond to a specific stimulus by persistently achieving one's goal. Motivation can be categorized into two; intrinsic motivation and extrinsic motivation. Intrinsic motivation refers to the internal drive within the person that pushes them to act willingly without aiming for any rewards. On the other hand, extrinsic motivation is when an individual is encouraged to do a task assigned to them in exchange for benefits. Based on an article by Baljoon et al. (2018), the motivation of nurses is influenced by several organizational and personal factors that affect their overall performance and commitment to work and to stay in their job.

Methods

Study Design

The study used an explanatory sequential mixed method design that helped the researchers supplement the analysis with sufficient knowledge and a better understanding of the nurses' experiences which addressed the research questions and contributed to producing an in-depth inference. In this

study, the researchers first gathered quantitative data, followed by the analysis of the result, in which the qualitative data developed a comprehensive and thorough interpretation and explanation of the outcome of the initial quantitative phase (Schoonenboom & Johnson, 2017). With this method, the researchers coherently integrated quantitative and qualitative analysis whereby explicit collection and refined data analysis was implemented (Creswell, 2015). The primary purpose of this study method is to reinforce the conclusion of the study while conducting an impartial investigation and interpretation of the information gathered (Subedi, 2016).

Samples/Participants

Quantitative strand

A total of 50 nurses residing within Metro Manila were included in this study. A purposive sampling technique was used in selecting the samples according to the following criteria: 1) registered nurse, 2) working in a public hospital in Metro Manila, 3) must have at least one year of work experience, and 4) must be between the ages of 25 and 65. Eight of those key informants were chosen to participate in the interview.

Qualitative strand

Participants with the lowest and highest intention to stay scores were chosen for qualitative data. The idea behind this criterion was that by selecting individuals with opposing intentions, the factors of nurses' desire to stay would be represented and thoroughly examined. The researchers identified four participants with the lowest and four with the highest scores. They were all invited and agreed to participate in the interview.

Data Collection

The researchers collected and analyzed quantitative data first. Resilience, motivation, and intention to stay were measured using validated instruments. In the quantitative strand, the researchers evaluated if there would be evidence of a significant relationship between measured variables. On the other hand, in the qualitative strand, the researchers looked at the dimensions of resilience and motivation that may affect the intention to stay of nurses.

Quantitative strand

The quantitative data were collected in July 2022 by the researchers within a span of one month. The researcher utilized the purposive sampling technique, in which a responder had to match a particular condition. The inclusion criteria were as follows: 1) registered nurse, 2) working in a Metro Manila public hospital, 3) with at least one year of work experience, and 4) between the ages of 25 and 65. Although the study's participants were nurses, the following individuals were excluded: 1) nurse working temporarily at a public hospital, 2) nurse working in other private institutions, 3) nurse with more than one job, and 4) nurse working in a public hospital outside Metro Manila. The respondents were recruited through various social media sites by creating a poster that could be shared publicly. The post includes the researcher's contact information, making it easy for the respondent to contact the researcher if they want to volunteer as a study participant.

Qualitative strand

The interview was conducted with eight of the key informants in August 2022. It took 12 days to interview the selected eight key informants. The researchers used a semi-structured indepth interview to ask planned open-ended questions, which was beneficial in generating a more comfortable setting and discourse to obtain reliable and comparable qualitative data. In addition, consent was obtained for an audio recording of the interview in order to use it as a reference for transcribing material; this was useful in rechecking replies that the researchers may have missed. Throughout the interview, the researchers transcribed the gathered data into a text document to thematize, identify, analyze, and report patterns within the data, establishing the conclusion and completion of this study.

Data Analysis

Quantitative strand

In accordance with determining the relationship between the reviewed variables, in understanding the study's hypotheses, in Moderation Analysis, mediators explain how and why the variables are significantly related. In a different manner, Mediator justifies the factors that resulted in a weak or unclear link between two variables that were predicted to have a reliable relationship. A brief description of the statistical analysis of moderators and mediators in quantile regression is provided, along with examples.

The incorporation of the independent variables (predictor and moderator variables) into the model allows for moderation analysis using Quantile Regression. Following that, the formation of the interaction term (the product of the independent variables, reflecting the moderator effect) is entered. The regression equation was input into and statistically treated using *R* version 4.2.0. Once the interaction term exhibits a statistically significant variation in the outcome variable, the moderator effect is assumed to exist (Bennett, 2000) and is now susceptible to interpretation and study.

The quantile regression model for the median of the dependent variable can be written as follows:

$$\tilde{y} = x' \beta_{0.5} + \varepsilon$$

where

 $\tilde{\mathbf{y}} \coloneqq \text{random vector of the 50}^{\text{th}}$ quantile or median of the dependent variable

 $x \coloneqq \text{vector of the observed value of the independent variables}$ $\beta \coloneqq \text{matrix of the estimated coefficient for the quantile regression model}$

 $\varepsilon\coloneqq \mathrm{random}\,\mathrm{vector}\,\mathrm{of}\,\mathrm{the}\,\,\mathrm{unknown}\,\mathrm{error}\,\mathrm{term}$ and assumed to be $E(\varepsilon)=0$

Quantile regression enabled the researchers to see the effects of independent variables on the conditional distribution of the dependent variable. The quantile regression model is based on the median, whereas classical regression is based on the mean. As a result, quantile regression is robust in the presence of outliers. Furthermore, quantile regression is more flexible than other regression approaches in identifying various correlations at different sections of the dependent variable's distribution. Quantile regression weights the distances between the values predicted by the regression line and the

observed values differently and then attempts to minimize the weighted distances (Le Cook & Manning, 2013).

The primary benefit of the quantile regression methodology is that it makes it possible to comprehend relationships between variables unrelated to the mean. This makes it useful for understanding non-normally distributed outcomes and nonlinear relationships with predictor variables' distances (Le Cook & Manning, 2013).

Qualitative strand

The present study's qualitative component concentrates on augmenting the original data acquired through quantitative research. Qualitative data was incorporated in examining the phenomena being examined since it would aggregate the investigation of more thorough data. Qualitative synthesis studies are prominent in the fields of nursing and health science; their use as a research method in education has been strictly limited (Major & Savin-Baden, 2020). In qualitative studies, as opposed to quantitative discourses, the emphasis is more on the examination of diverse views, values, and reasons for a certain event. During the course of assessing the nurses' replies to each question from the semi-structured interview guide, major and minor themes were identified and labeled. (Clarke & Braun, 2013).

Thematic analysis is a qualitative approach commonly utilized in primary research and systematic reviews. Although widely utilized, its use for the latter purpose is sometimes inadequately defined, which impacts the quality of the resulting analysis. Thematic analysis has been defined broadly as "a process for detecting, analyzing, and reporting patterns (themes) inside data" (Braun & Clarke, 2006). In a systematic review framework, thematic analysis is divided into three parts. The first step is to code the text in the papers line by line. This leads to the second stage, producing descriptive themes closely related to the studies featured. The third step is the formulation of the final analytical themes, in which the researchers might go beyond the study results to produce new interpretations, explanations, or hypotheses (Thomas & Harden, 2008).

Validity and Reliability/ Trustworthiness

Quantitative strand

A self-made questionnaire was utilized in this study to gather information about the demographic of the respondents. The Connor-Davidson Resilience Scale (CD-RISC-10), Work Extrinsic and Intrinsic Motivations scale (WEIMS), and Garbee and Killacky's Intent to Stay Scale (GKISS) were used to measure resilience, motivation, and intention to stay, respectively. An interview was conducted after the structured survey.

CD-RISC-10 is a self-assessment resilience scale including 10 of the original 25 items and is scored on a 5-point scale that varies from not true at all (zero) to true nearly all of the time (four), with a total potential score ranging from 0 to 40. Furthermore, it has been inspected in both general population and clinical samples and established to have high statistical quality; this includes good internal consistency and test-retest reliability. The researchers secured the permission of the authors before using the CD-RISC. It was only used after receiving approval from the correspondence author, Sir Jonathan Davidson. The 10-item scale was chosen over the

former 25-item because it is statistically superior as obtained through confirmatory aspects and item-level evaluations. Additionally, past research discovered that the items had excellent reliability of 0.88 and 0.89, indicating that it is a powerful determinant of resilience. Finally, the factor loadings for all CD-RISC-10 items ranged from moderate to high, indicating that the internal validity of the instrument was supported (Gonzalez et al., 2016; Mealer et al., 2016).

WEIMS is an 18-item questionnaire to assess work motivation (Ryan & Deci, 2000). It was only used after the corresponding author, Dr. Maxine Tremblay, had given her permission. This questionnaire helped the researchers determine the respondents' motivation levels. Additionally, each of the subscale items is rated on a Likert-type scale ranging from "1-2" (does not correspond at all), "3-6" (corresponds moderately), and "7" (corresponds exactly). Items 4, 8, and 15 focused on intrinsic motivation; items 5, 10, and 18 focused on integrated regulation; items 1, 7, and 14 focused on identified regulation; items 6, 11, and 13 focused on introjected regulation; items 2, 9, and 16 focused on external regulation; items 3, 12, and 17 focused on motivation. Regarding construct validity, WEIMS has item-to-total correlations of greater than 0.50 with all of the subscales and Cronbach's alpha coefficients greater than 0.50 for each of its six subscales. In addition, the INTEG of the questionnaire ranges from 0.64 (AMO) to 0.83 (AMO) (Tremblay et al., 2009).

GKISS was published publicly, allowing the researchers to view its content. The researchers asked permission to use the questionnaire by emailing the author. This is a four-item questionnaire used to assess the intention to remain employed in an institution (Price & Mueller, 1981). Each item is scored on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly disagree). Furthermore, Cronbach's alpha scores of 0.89, 0.88, and 0.85 for reliability were determined (Speth et al., 2020).

Qualitative strand

An interview guide was constructed and prepared by the researchers. The semi-structured questionnaire contains open-ended questions, which are flexible for the researchers to tweak and ask necessary questions in order to obtain every information needed for the study. The pliability of the interview guide was a big help in the quantity and quality of data collected, for it fits into each respondent's exclusive experiences resulting in an open and manageable interview. As the nature of the study is explanatory sequential, the questions included in the interview were formulated based on the gathered information from the quantitative investigation. Therefore, the structure of the interview guide was subsequent to the initial survey. This provided comprehensive details of the variables examined in quantitative and enabled the researcher to have more explored qualitative data.

Ethical Considerations

The researchers recognized the importance of maintaining ethical considerations and facing the consequences of violating them as one of the responsibilities in this study. The research was carried out safely and ethically, notably without causing harm to the subjects. The researchers provided them with an informed consent form indicating approval to

participate in the research study. Furthermore, the researchers secured an Ethical Clearance from the Institutional Ethics Review Committee (IERC) of the Our Lady of Fatima University with reference number 2022-IERC1-20192 before the conduct of the study.

Results

Quantitative Analysis Results

Table 1 Characteristics of the respondents

Characteristics	f	%
Age		
25 to 30 years old	4	8.0
31 to 35 years old	19	38.0
36 to 40 years old	15	30.0
41 to 45 years old	7	14.0
46 to 50 years old	3	6.0
51 to 55 years old	1	2.0
56 to 60 years old	1	2.0
Sex at birth	•	
Female	41	82.0
Male	9	18.0
Civil status		
Married	25	50.0
Single	23	46.0
Widowed/ Widower	2	4.0
Educational attainment	2	4.0
College Graduate	46	92.0
Master's degree	4	8.0
Bi-weekly income		0.0
PHP 11,001 to 15,000	2	4.0
PHP 15,001 to 20,000	48	96.0
	40	90.0
Number of working hours	24	40.0
8 hours	21	42.0
9 hours	-	
10 hours	3	6.0
12 hours and above	26	52.0
Institution position	0	40.0
OR nurse	8	16.0
Staff nurse	42	84.0
Length of work experience		0.0
1 to 3 years	4	8.0
4 to 6 years	10	20.0
7 to 9 years	6	12.0
10 years and above	30	60.0
Area of practice	40	04.0
Emergency room	12	24.0
OB ward	9	18.0
Operating room	9	18.0
Other (COVID ward)	1	2.0
Other (EENT)	1	2.0
Other (Female medical ward)	1	2.0
Other (Geriatric and	1	2.0
gerontology)		
Other (ICU)	2	4.0
Other (Medical-surgical)	1	2.0
Other (NICU)	4	8.0
Other (Neuro ward)	1	2.0
Other (OPD)	1	2.0
Other (Office)	1	2.0
Other (Oncology)	2	4.0
Other (Pediatric nurse)	2	4.0
Other (Recovery room)	1	2.0
Other (Urology)	1	2.0
Other (Oncology) Other (Pediatric nurse)	2 2	4.0 4.0
J.: (0.0.09)	•	

A total of 50 nurses residing within Metro Manila were surveyed in this study. **Table 1** exhibits the frequency and percentage distribution of the respondents by demographic and work profile. In contrast, **Table 2** presents a summary of the WEIMS score, CD-RISC score, and GKISS score of the respondents.

The respondents are predominantly married (50%), female (82%), college graduates (92%), aged 31 to 35 years old (38%), staff nurses (84%), and assigned to ER (24%) during the survey. The majority of the surveyed nurses were working 12 hours and above (52%) and earning a bi-weekly income of PHP 15,001 to 20,000 (96%). Furthermore, the respondents were mostly ten years and above (60%) in nursing.

A multivariate Shapiro-Wilk test was conducted to check if the scores followed a multivariate normal distribution. The median was computed to summarize the data since the scores are skewed and do not follow a multivariate normal distribution, SW (50) = 0.807, p < 0.001. The respondents' scores were not distributed symmetrically around the mean or average score. The interquartile range was also presented in **Table 2** to understand the variability of the scores.

Table 2 Summary of the WEIMS Score, CD-RISC Score, and GKISS score of the respondents

	Description	Mdn (IQR)
WEIMS score	Motivation score	102 (95-110)
CD-RISC score	Resiliency score	32 (29-38.8)
GKISS score	Intention to stay score	12.5 (12-14)

Legend: Mdn = median, IQR = interquartile range

Table 3 Estimated coefficients of the quantile regression model of GKISS score

	Estimated Coefficients	t	p
(Intercept)	9.292	1.642	0.107
CD-RISC	-0.012	-0.108	0.914
score			
WEIMS score	0.038	0.586	0.560

Legend: = estimated coefficient, t = Wald t-test statistic, p = p-value Note: The predictor variable is significant when the p-value of its estimated coefficient is less than or equal to the significance level.

Table 2 shows the median scores of the respondents in the three administered questionnaires, which were used to assess their resilience, motivation, and intention to stay. Focusing on the outcome, the respondents' median score on the Connor-Davidson Resilience Scale (CD-RISC-10) is high, given that the maximum score is 40, which indicates that most nurses have a high level of resilience. While the respondents had a high median score on the Work Extrinsic and Intrinsic Motivations Scale (WEIMS), which has a possible maximum score of 126, demonstrating the high level of motivation among most nurses. On the other hand, the median Garbee and Killacky's Intent to Stay Scale (GKISS) score was moderately low, indicating their likelihood of remaining in their current profession is moderately low. In conclusion, the result reveals that nurses are highly driven and capable of withstanding any difficulties they may encounter. However, it does not imply that being motivated and resilient will guarantee to stay or remain in their profession.

Based on Table 3, there is a unit decrease in the GKISS score of the respondents for every unit increase in their CD-RISC score when other variables are held constant. On the

other hand, there is a unit increase in the GKISS score of the respondents for every unit increase in their WEIMS score when other variables are held constant. This regression model can be written as follows:

 $\tilde{y}_{GKISS\ score} = 9.292 - 0.012x_{CD-RISC\ score} + 0.038x_{WEIMS\ score}.$

However, it was found that the CD-RISC score has little to no effect on the prediction of the GKISS score of the surveyed nurses (p = 0.914). Furthermore, it was also revealed that the WEIMS score has little to no impact on the prediction of the GKISS score of the surveyed nurses (p = 0.560).

Qualitative Analysis Results

Findings for the qualitative study were derived from eight respondents from the quantitative phase using an in-depth semi-structured interview to identify and explore the influences of Filipino nurses to stay in the healthcare service profession amidst the COVID-19 pandemic. This study identified three major themes, including the motivations, resilience, and intention to stay of Filipino nurses.

Theme 1: Motivation

The nurses' motivation to stay in service primarily lies in obtaining exemplary nursing skills, providing a good quality of nursing service, family as motivation, as well as a passion for healthcare service. Most participants expressed that they consider their family and colleagues a source of inspiration, hope, and strength. This is why they still pursue their profession and fulfill their ethical obligations despite being forced to accept the challenges and risks in their life.

"One thing that makes me happy and inspires me in my work is my colleagues. Whenever I see them, no matter how hard the situation is, they never give up, and we really try to work together hand-in-hand. We will face this pandemic united until the end, offering our service to the patients in need." (KI20)

"How did the pandemic affect my motivation—for me, it gave me strength, and it inspired me, most especially during those times when my family was also affected by the virus. The worst part is that I am the carrier. That was when I was assigned to the COVID ward." (KI49)

"Personally, for me, my family is the reason why I am motivated. That's why we keep on going. As they say, 'for whom do you continue to move forward?' of course, for my family, right? (KI32)"

The participants also shared that being a nurse is a form of calling. Their life's purpose is to fulfill their calling as nurses. It is a vocation considering they believe they have a natural aptitude to pursue the profession.

"I believe that I was born to become a nurse. Growing up as a child, my mother used to tell me that I was destined to be a nurse, which eventually made me realize that, indeed, it was destiny once I started working, thinking that forsooth, nursing has been my dream profession." (KI31)

"Nursing is my calling; it is my purpose. It will always fall to it being my calling. Also, it is my sworn oath. It is not just my profession but my calling. It is like you were called to serve; you were called to heal." (Kl34)

Five interviewed respondents were motivated by religion. Participants shared that believing in the omnipotent being

gives them strength to carry on with their everyday lives and inspires them to keep moving despite the hurdles they experience.

"Do not forget that God should be the center of all these. Before you go one step before you step forward, God must come first. Ask for the proper guidance of the holy spirit to find the right path." (KI20)

"My adjustment personally is maybe you need to pray every time you go on duty. We should be on the sound mind." (KI27)

"Before we handle our patient, we have our prayers. That is why in my prayers, I include the safety of my patient, my license, and praying that we can grow even more as a nurse and learn new things." (KI49)

Theme 2: Resilience

The study has found several mechanisms participants engage in to cope with the heightened stress during hospital duties. In addition, the participants shared positive and negative coping mechanisms to keep up with the heavy workload, overtime, and undercompensated work.

Participants shared that having a positive mindset, being adaptive in every circumstance, and time management are the essential skills a nurse must possess to survive the hectic and fast-paced work environment in the hospitals.

"Actually, you really need to adapt. You will have to adjust every day during the service call, especially if you are entering the hot zone. For instance, we still have to look after the COVID-19 patients even if there is a staffing shortage in the government hospital." (KI32)

"My secret there is having the right mindset. The mindset should always be positive. My senior used to tell me, "you should always think that the workload is toxic so that your mindset and energy are prepared for toxicity," you should have a positive mindset. (KI31)

"We know how to manage our time as healthcare workers, especially nurses. That is simply time management. We need to prioritize. We need to plan our time by making a schedule for each activity. Everything must be planned." (KI20)

"Time management, that's all. Or you find ways to make work easier for you. You have to come up with ideas to make the work easier for you. If you don't come up with your own ways to manage the workload, you won't go home on time." (KI34)

In addition, the main drive as to why Filipino nurses are resilient is the sense of fulfillment they feel whenever they are able to give service to their respective patients.

"When I got to the hospital, I became aware of the situation. It's not at all frightening. I feel delighted to serve the patients. It feels great to be here and to be able to help those in need. My anxiety, anxiousness, and dread of being a victim of COVID-19 were all alleviated. (KI20)

Maybe what makes me appreciate my job is when I feel that the quality of nursing care that I deliver to my patients is adequate and that they improve as a result of the care that I provide. I can't stop myself. I'm not going to give up." (KI24)

On the other hand, some participants also identified their negative resilience strategies, including stress eating and venting.

"I'm eating. I focused my anxiety on eating. I pack a lot of food. Sometimes my patience will be put to the ultimate test; and, I am going to simply eat." (Kl34)

"I admit that I am one of those who do stress eating. Due to tiredness and bad feelings about what happened, I feel like I want to eat a lot after my duty. Or maybe, sometimes, to release my tension, I will say bad words. I swear, but of course, I don't swear in front of the patient." (KI31).

"I really don't know how to handle pressure, especially when the questions my colleagues ask me are obvious. My head is getting hot. I admit my head is getting hot. When the question is obvious, then you can't think properly. If it seems like you're going to rely on nurses for everything, it can't be. Are nurses the only ones to think about this department? Can't you think? Cope up? Just eat; so many nurses gain weight due to stress. After your duty, you will eat. After you eat, you go to sleep. You can no longer exercise. They say you should exercise. But your life is too stagnant because of too much work, so you should just sleep." (KI27)

"Yeah, I also came at that time. But what I always say in my mind, I've made it this long. If I didn't really love this profession, I would have given up long ago." (KI33)

When handling failures from hospital accidents, mishaps, and other patient-related incidences, participants shared that their love for the nursing profession and providing good nursing care keep them touched up and staying in the nursing profession.

"Being a nurse is exhausting and draining. At the same time, it is not as simple as an office job. But it is the actual outcome that inspires me: that the patients who came in who were not feeling well but would go home well, that they are well, that they have healed." (KI24)

Theme 3: Intention to Stay

In terms of staying in the profession of being a nurse, most participants expressed their intention to stay in the nursing profession. However, others also shared that they would like to pursue other professions related to allied health, particularly being a clinical instructor or researcher.

"Right now, I still want to be a nurse. However, rather than being a bedside nurse, I also want to try being a clinical instructor or a researcher, as there are different fields in nursing that I can venture into." (KI31)

"I had thought of it [teaching] before, especially when I was reviewing for the board exam. I got inspired by the teaching styles of the instructors when I was reviewing for boards. I still like to be hands-on with the patients, so I am still weighing my options." (KI32)

The long-standing problems related to medical health services even before the pandemic heightened and became a major setback for most of the participants interviewed to go to other countries and pursue a nursing career that adequately pays well and values the service that they give.

"Perhaps, honestly, raise the pay. It's a severe matter. Increase our pay since we are nurses with dreams for our families. Working as a nurse in the Philippines is extremely toxic. They should raise our pay even a little to enhance our nurses' morale and make us work more when we come in, in my opinion. Overtime is unpaid when you work in a government or public hospital. It appears that we are underappreciated here. It's as though our additional mile is whatever we can go. Raising our salary is just a little relief." (KI32)

"If in the Philippines, I have no plans to stay as a nurse. But if given a chance in other countries, European countries perhaps, where I will be stable, my salary will be higher, and my patients are not like patients in the Philippines, which is too many compared to other countries, or the government treats us better here, I will stay in my profession. Other

countries' nurse-to-patient ratio is 1:3 or 1:3. And they actually give their nurses the time they need to recover. They adore nurses more overseas than we do here." (KI27)

"Yes, since I'm exhausted in the Philippines. Because it appears that even if you offer your everything, it is still insufficient, not just on professional, but also on psychological, emotional, and mental investments. However, the pay is still minimal. Nursing reform in the Philippines cannot be completed in a year or five years. It cannot be done in this manner since there is a high demand for nursing changes in the Philippines." (KI31)

On the contrary, some participants interviewed shared that the love for the service, serving the Filipino people, and the call of duty are the things that keep Filipino nurses staying in service

"I think this is where God put me, to be a nurse and to serve the people. My utmost motivation is that I am a public servant. Even if the service itself is hard and tiring, at the end of the day, I am still happy and fulfilled. It makes us whole whenever we can provide service to our fellow countrymen." (KI20)

"My purpose is really to serve. As health workers, we are the ones who can provide help to our patients during times like COVID-19. It is really inspiring to be able to help other people, especially the ones who got infected by the virus." (KI49)

Discussion

As shown earlier, most nurses who continue to work in public hospitals are between the ages of 31 and 40. A study written by Ortiga et al. (2022) exhibits the dissatisfaction of new nurses when the professional values they acquire in school conflict with their work. On the other hand, nurses aged 41 and above are scarce because health-related conditions, digitalization, and hours of work are prominent issues experienced by nurses, as stated by Uthaman et al. (2016). Older nurses are leaving the profession primarily for financial reasons. Nurses tend to retire if they believe they have achieved financial security (Cyr, 2005). Under the category of sex of birth, it is evident that female nurses have a more significant number than male nurses. Despite the growing number of male nurses serving in hospitals, it is clear that their number still does not exceed even a quarter of those female nurses, as shown in the data. According to Mao et al. (2021), there is an overall nursing workforce shortage, along with gender discrepancy, which is considered a long-term dilemma that affects most countries. Nursing was dominated by females and defined as a womanly profession through Nightingale's reform in the 1900s that encouraged women rather than men to become nurses (Cook-Krieg, 2011).

It was also shown that married and single nurses share almost the same percentage, which shows that nursing is a profession for either status. Both have goals and passion for serving the public, including needs to be met daily. In conjunction with the study of Morika et al. (2019), married and unmarried nurses perform well in providing patient care.

Regardless of civil status, a nurse's ability to do their job and care for patients is unaffected. Following their hours of work, the researchers found that nurses either work 8 hours or 12 hours and above, with the latter having more significant numbers, attributed to the fact that they extend their working hours due to understaffing and demanding workloads. According to Stimpfel et al. (2012), shift schedules usually last

eight or twelve hours. Institutions have tried to create long work shifts to address the personnel shortage.

Qualitative results from this research coincide with the findings of Nimako et al. (2019), which stated that nurses stayed in the profession due to a sense of fulfillment from their noble job or caring for others. The findings of this paper show that being resilient and motivated are great determinants of nurses' retention in the healthcare service. Nurses' intention to stay greatly lies in the pursuit of excellence in the nursing profession, passion for patient service, family, and faith. Furthermore, it is reported that the sense of fulfillment and positive and negative mechanisms are being exercised by the participants as forms of resilience strategies in order to cope with the stress the nurses experience during hospital duties. In summary, motivation and resilience are great influencers of nurses' retention despite the heavy workload and exhaustive clerical responsibilities. It could be apparent, however, that while motivation and resilience can lead to outstanding work performance for Filipino nurses, institutional reforms and addressing the long-standing challenges in the health service sector must be recognized, addressed, and fulfilled. In 2019, it was reported that a total of 193,00 nurses who received the education, skills, and training are now working abroad. This accounts for the 85% of Filipino nurses who received skills and training in the Philippines (Koty, 2021).

Implications of the Study

For certain people, including prospective researchers and nurses who want to learn more about the relationship between their resilience, motivation, and desire to continue in their field, this research study comes highly recommended. Furthermore, due to the dearth of studies on this subject, this study will provide future researchers with the same notion with a foundational understanding of how to conduct or plan their research. In light of the above, it is important to emphasize one of this study's recommendations: choose an excellent and easily accessible site for nurse responders to collect a bigger sample and have more significant and accurate data, especially if the study's geographic area is broad.

The findings imply that nurses' strong resilience and motivation do not alter their intention to stay, since being robust and driven is not enough to persuade them to continue in their field because they still have some basic needs that they must meet. This shows that there are still issues in the healthcare system and that the government should focus more on providing nurses with enough salary, appropriate incentives, and workplace improvements so that nurses' motivation and resilience reflect on their intention to stay.

The findings for both quantitative and qualitative strands of this study imply that nurses' strong resilience and motivation are the main drivers for them to continue and improve their capabilities as a nurse even in the midst of difficulties. However, these alone could not be an adequate reason for Filipino nurses to continue their professional careers in the country. These findings are associated with the lack of institutional interventions, long-standing problems in the sphere of healthcare institutions, and inadequate consideration of the situation of the people in the healthcare service system in times of the pandemic. As the intention to stay of Filipino nurses heavily rely on job satisfaction and a good working environment, it is relevant to also delve into the

challenges and adversaries that go around the healthcare system. Coming up with interventions with regard to the issues of giving Filipino nurses the appropriate pay and adequate patient-to-nurse ratio would be a good starting point to address the long-standing issues in the healthcare service. The strong adherence of Filipino nurses lies in the passions and motivations that their profession brings into their day-to-day lives. Hence, the issues in the healthcare system and the government should focus more on providing nurses with enough salary, appropriate incentives, and workplace improvements so that nurses' motivation and resilience reflect on their intention to stay.

Limitations of the Study

The relationship between resilience and intent to stay has mediating factors that were not considered in this study. A study by Liu et al. (2019) suggested that the direct impact of resilience on the intention to remain was the strongest, and perceived professional gains mediated the relationship between resilience and intent to stay. Another study by Yu et al. (2021) shows that nursing professional commitment is entirely mediated between resilience and intention to stay. The nursing professional commitment was highly positively correlated to the choice to stay. Mediating factors may have been the reason why the relationship between resilience and intent to stay was not observed. The researchers did not identify mediating factors in the present study as this was beyond the scope of the research.

Conclusion

This research aimed to investigate motivation and resilience as factors of nurses' intention to stay. Based on the quantitative and qualitative analysis, it can be concluded that motivation and resilience determine nurses' intention to stay in the healthcare service. The result of this study includes the motivations and resilience strategies of most nurses in order to cope with the fast-paced environment of hospitals, especially during the height of the COVID-19 pandemic. It has also been found that the challenges associated with healthcare service in the Philippines, including undercompensation for healthcare workers, unequal patient-tonurse ratio, overtime, and excessive workloads, are major deal breakers for the Filipino nurses to leave the country and pursue a greener passion in Western countries that value their service. In conclusion, internal factors such as motivating oneself and resilience strategies could be a factor in order for nurses to stay in their professions. Challenges that encompass healthcare service are, on the other hand, the major drawback for most nurses to stay out of the country and look for opportunities in other countries for better compensation, value for work, and well-being.

Declaration of Conflicting Interest

The authors declared no conflict of interest.

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Authors' Contributions

All authors contributed equally to the study. In addition, all authors agreed to be accountable for all contents of the research and agreed with the final version to be published.

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Data Availability

The dataset generated during and analyzed during the current study is available upon reasonable request to the Research Development and Innovation Center (RDIC) of Our Lady of Fatima University, Valenzuela City, Philippines.

References

- American Psychological Association. (2022). Resilience. https://www.apa.org/topics/resilience
- Baljoon, R. A., Banjar, H. E., & Banakhar, M. A. (2018). Nurses' work motivation and the factors affecting It: A scoping review. *International Journal of Nursing & Clinical Practices*, 5(1), 277. https://doi.org/ 10.15344/2394-4978/2018/277
- Bennett, J. A. (2000). Mediator and moderator variables in nursing research: Conceptual and statistical differences. *Research in Nursing & Health*, 23(5), 415-420. https://doi.org/10.1002/1098-240X(200010) 23:5%3C415::AID-NUR8%3E3.0.CO;2-H
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77-101. https://doi.org/10.1191/1478088706qp063oa
- Chiang, Y.-C., Lee, H.-C., Chu, T.-L., Wu, C.-L., & Hsiao, Y.-C. (2021). The relationship between spiritual health, health-promoting behaviors, depression and resilience: A longitudinal study of new nurses. *Nurse Education in Practice*, 56, 103219. https://doi.org/10.1016/j.nepr. 2021.103219
- Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist*, 26(2), 120-123.
- Cook-Krieg, B. A. (2011). Are you man enough to be a nurse? The road less traveled [Doctoral Dissertation, Iowa State University]. Iowa.
- Creswell, J. W. (2015). A concise introduction to mixed methods research. California: SAGE publications.
- Cyr, J. P. (2005). Retaining older hospital nurses and delaying their retirement. JONA: The Journal of Nursing Administration, 35(12), 563-567
- Eketu, C. A., & Ogbu Edeh PhD, F. (2015). Social intelligence and employee intention to stay. *International Journal of Novel Research in*

- Marketing Management and Economics, 2(1), 27-34. https://dx.doi.org/10.2139/ssrn.3480576
- Ekström, A. M., Berggren, C., Tomson, G., Gostin, L. O., Friberg, P., & Ottersen, O. P. (2021). The battle for COVID-19 vaccines highlights the need for a new global governance mechanism. *Nature Medicine*, 27(5), 739-740. https://doi.org/10.1038/s41591-021-01288-8
- Ellis, E. G. (2020). How health care workers avoid bringing Covid-19 home. Wired. https://www.wired.com/story/coronavirus-covid-19-health-care-workers-families/
- Gayol, M., & Lookingbill, T. (2022). Early career burnout in nursing. *Nursing Clinics*, 57(1), 21-28. https://doi.org/10.1016/j.cnur.2021.11.002
- Gonzalez, S. P., Moore, E. W. G., Newton, M., & Galli, N. A. (2016). Validity and reliability of the Connor-Davidson Resilience Scale (CD-RISC) in competitive sport. *Psychology of Sport and Exercise*, 23, 31-39. https://doi.org/10.1016/j.psychsport.2015.10.005
- Hewitt Associates. (2004). Strategies for cost management of the HR function. Illinois, USA: Aon Hewitt.
- Jun, J., Ojemeni, M. M., Kalamani, R., Tong, J., & Crecelius, M. L. (2021).
 Relationship between nurse burnout, patient and organizational outcomes: Systematic review. *International Journal of Nursing Studies*, 119, 103933. https://doi.org/10.1016/j.ijnurstu.2021.103933
- Koty, A. C. (2021). How COVID-19 has impacted Philippine medical worker recruitment. https://www.aseanbriefing.com/news/how-covid-19-has-impacted-philippine-medical-worker-recruitment/
- Kuo, H. T., Lin, K. C., & Li, I. c. (2014). The mediating effects of job satisfaction on turnover intention for long-term care nurses in Taiwan. *Journal of Nursing Management*, 22(2), 225-233. https://doi.org/10. 1111/jonm.12044
- Lai, C.-C., Shih, T.-P., Ko, W.-C., Tang, H.-J., & Hsueh, P.-R. (2020). Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and coronavirus disease-2019 (COVID-19): The epidemic and the challenges. *International Journal of Antimicrobial Agents*, 55(3), 105924. https://doi.org/10.1016/j.ijantimicag.2020.105924
- Laschinger, H. K. S., Grau, A. L., Finegan, J., & Wilk, P. (2010). New graduate nurses' experiences of bullying and burnout in hospital settings. *Journal of Advanced Nursing*, 66(12), 2732-2742. https://doi.org/10.1111/j.1365-2648.2010.05420.x
- Le Cook, B., & Manning, W. G. (2013). Thinking beyond the mean: A practical guide for using quantile regression methods for health services research. Shanghai Archives of Psychiatry, 25(1), 55-59. https://doi.org/10.3969%2Fj.issn.1002-0829.2013.01.011
- Leys, C., Arnal, C., Wollast, R., Rolin, H., Kotsou, I., & Fossion, P. (2020). Perspectives on resilience: Personality trait or skill? *European Journal of Trauma & Dissociation*, 4(2), 100074. https://doi.org/10.1016/j.eitd.2018.07.002
- Liu, Y., Kumar, M., Katul, G. G., & Porporato, A. (2019). Reduced resilience as an early warning signal of forest mortality. *Nature Climate Change*, 9(11), 880-885. https://doi.org/10.1038/s41558-019-0583-9
- Major, C. H., & Savin-Baden, M. (2020). An introduction to qualitative research synthesis: Managing the information explosion in social science research (1st ed.). London: Routledge. https://doi.org/ 10.4324/9780203497555
- Mao, A., Cheong, P. L., Van, I. K., & Tam, H. L. (2021). "I am called girl, but that doesn't matter"-perspectives of male nurses regarding gender-related advantages and disadvantages in professional development. BMC Nursing, 20, 24. https://doi.org/10.1186/s12912-021-00539-w
- Marzilli, C. (2021). A year later: Life after the Year of the Nurse. *Belitung Nursing Journal*, 7(2), 59-61. https://doi.org/10.33546/bnj.1509
- Mealer, M., Schmiege, S. J., & Meek, P. (2016). The Connor-Davidson Resilience Scale in critical care nurses: A psychometric analysis. *Journal of Nursing Measurement*, 24(1), 28-39. https://doi.org/ 10.1891/1061-3749.24.1.28
- Middleton, R., Loveday, C., Hobbs, C., Almasi, E., Moxham, L., Green, H., Halcomb, E., & Fernandez, R. (2021). The COVID-19 pandemic–A focus on nurse managers' mental health, coping behaviours and organisational commitment. *Collegian*, 28(6), 703-708. https://doi.org/10.1016/j.colegn.2021.10.006
- Morika, H. D., Suharizal, K., & Yasmi, L. (2019). Characteristics and motivation with nurse performance in applying patient safety in hospital. *International Journal Of Community Medicine And Public Health*, 6(1), 44-50. https://doi.org/10.18203/2394-6040.ijcmph 20185225
- Nazareno, J., Yoshioka, E., Adia, A. C., Restar, A., Operario, D., & Choy, C. C. (2021). From imperialism to inpatient care: Work differences of

- Filipino and White registered nurses in the United States and implications for COVID-19 through an intersectional lens. *Gender, Work & Organization*, 28(4), 1426-1446. https://doi.org/10.1111/gwap.12657
- Negussie, B. B., & Oliksa, G. B. (2020). Factors influence nurses' job motivation at governmental health institutions of Jimma Town, Southwest Ethiopia. *International Journal of Africa Nursing Sciences*, 13, 100253. https://doi.org/10.1016/j.ijans.2020.100253
- Nimako, B. P., Osei, S. A., Antwi, F. B., & Peprah, W. K. (2019, 2019). Psychosocial well-being and Job Satisfaction among Nurses in the Philippines. 7th International Scholar Conference, Indonesia.
- Nurmohamed, N. S., Collard, D., Reeskamp, L. F., Kaiser, Y., Kroon, J., Tromp, T. R., Van den Born, B.-J. H., Coppens, M., Vlaar, A. P. J., & Beudel, M. (2022). Lipoprotein (a), venous thromboembolism and COVID-19: A pilot study. *Atherosclerosis*, 341, 43-49. https://doi.org/10.1016/j.atherosclerosis.2021.12.008
- Ortiga, Y. Y., Diño, M. J., & Macabasag, R. L. A. (2022). Clocking out: Nurses refusing to work in a time of pandemic. *Social Science* & *Medicine*, 115114. https://doi.org/10.1016/j.socscimed.2022.115114
- Price, J. L., & Mueller, C. W. (1981). A causal model of turnover for nurses.

 Academy of Management Journal, 24(3), 543-565. https://doi.org/10.5465/255574
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78. https://psycnet.apa.org/ doi/10.1037/0003-066X.55.1.68
- Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. *KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 69(2), 107-131. https://doi.org/10.1007/s11577-017-0454-1
- Schwartz, J., King, C.-C., & Yen, M.-Y. (2020). Protecting healthcare workers during the coronavirus disease 2019 (COVID-19) outbreak: Lessons from Taiwan's severe acute respiratory syndrome response. Clinical Infectious Diseases, 71(15), 858-860. https://doi.org/10.1093/cid/ciaa255
- Singhal, T. (2020). A review of coronavirus disease-2019 (COVID-19). *The Indian Journal of Pediatrics*, 87(4), 281-286. https://doi.org/10.1007/s12098-020-03263-6
- Smith, C. (2020). The structural vulnerability of healthcare workers during COVID-19: Observations on the social context of risk and the equitable distribution of resources. Social Science & Medicine, 258, 113119. https://doi.org/10.1016/j.socscimed.2020.113119
- Southwick, S. M., Bonanno, G. A., Masten, A. S., Panter-Brick, C., & Yehuda, R. (2014). Resilience definitions, theory, and challenges: Interdisciplinary perspectives. *European Journal of Psychotraumatology*, *5*(1), 25338. https://doi.org/10.3402/ejpt.v5.25
- Speth, M. M., Singer-Cornelius, T., Oberle, M., Gengler, I., Brockmeier, S. J., & Sedaghat, A. R. (2020). Mood, anxiety and olfactory dysfunction in COVID-19: Evidence of central nervous system involvement? *The*

- Laryngoscope, 130(11), 2520-2525. https://doi.org/10.1002/lary. 28964
- Stimpfel, A. W., Sloane, D. M., & Aiken, L. H. (2012). The longer the shifts for hospital nurses, the higher the levels of burnout and patient dissatisfaction. *Health Affairs*, 31(11), 2501-2509. https://doi.org/ 10.1377/hlthaff.2011.1377
- Subedi, D. (2016). Explanatory sequential mixed method design as the third research community of knowledge claim. *American Journal of Educational Research*, 4(7), 570-577.
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology*, 46(2), 259-293. https://doi.org/10.1111/j.1744-6570.1993.tb00874.x
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, 8(1), 1-10. https://doi.org/10.1186/1471-2288-8-45
- Tremblay, M. A., Blanchard, C. M., Taylor, S., Pelletier, L. G., & Villeneuve, M. (2009). Work Extrinsic and Intrinsic Motivation Scale: Its value for organizational psychology research. Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement, 41(4), 213-226. https://doi.org/10.1037/a0015167
- Uthaman, T., Chua, T. L., & Ang, S. Y. (2016). Older nurses: A literature review on challenges, factors in early retirement and workforce retention. *Proceedings of Singapore Healthcare*, 25(1), 50-55. https://doi.org/10.1177/2010105815610138
- Wei, H., Roberts, P., Strickler, J., & Corbett, R. W. (2019). Nurse leaders' strategies to foster nurse resilience. *Journal of Nursing Management*, 27(4), 681-687. https://doi.org/10.1111/jonm.12736
- World Health Organization. (2021). Health and care worker deaths during COVID-19. https://www.who.int/news/item/20-10-2021-health-and-care-worker-deaths-during-covid-19
- Yang, L., Liu, S., Liu, J., Zhang, Z., Wan, X., Huang, B., Chen, Y., & Zhang, Y. (2020). COVID-19: Immunopathogenesis and Immunotherapeutics. Signal Transduction and Targeted Therapy, 5(1), 1-8. https://doi.org/10.1038/s41392-020-00243-2
- Yu, H., Huang, C., Chin, Y., Shen, Y., Chiang, Y., Chang, C., & Lou, J. (2021). The mediating effects of nursing professional commitment on the relationship between Social support, resilience, and intention to stay among newly graduated male nurses: A cross-sectional questionnaire survey. *International Journal of Environmental Research and Public Health*, 18(14), 7546. https://doi.org/10.3390/ijerph18147546
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