

# Burnout and Job Performance of Nurses in Adult Care Settings During COVID-19 Pandemic

Blesslove Pinamang Nimako\* RN; Teresa N. Basatan, Ph.D., RN

School of Advanced Studies, Saint Louis University- Baguio City, Philippines

**Abstract** Initial evidence suggested that nurses were exposed to a chaotic healthcare environment with an extensive workload at the height of the COVID-19 crisis, exposing them to higher levels of physical, emotional, and psychological exhaustion and increasing burnout, which negatively impacted nurse performance, productivity, and patient outcomes. However, a literature search revealed insufficient data on these phenomena in the Philippines, particularly, Baguio City. Therefore, this quantitative study aimed at examining the relationship between burnout and job performance among nurses in the adult care settings during the COVID-19. Using a purposive sampling technique, the study utilized a descriptive correlational design and 84 nurses working in the adult care setting from a selected hospital in Baguio City, Philippines. The study used the Copenhagen Burnout Inventory and the Schwirian Six Dimension of Nurse Performance scale with a reliability of .798 and .939, respectively. The study also gathered data on nurses' coping strategies using semi-structured questions. The study analyzed all data descriptively using means, frequencies, Pearson Correlation, and ANOVA. The results showed that nurses in the adult care settings had low burnout ( $M=2.3159$ ); scoring a moderate personal burnout and low client and work-related burnout, and high job performance ( $M=3.210$ ); with a very high score in critical care and professional development domain, while, scoring a high leadership, teaching and collaboration, planning and evaluation, and interpersonal development domains. A Pearson Correlation coefficient showed a moderately significant *negative relationship* ( $r= -.340$ ,  $p= .002$ ) between burnout and job performance at 0.01 level and 95% confidence interval, in that when burnout increases, job performance decreases, and vice versa. There was no significant difference in burnout and job performance when considering nurses' years of working experience and unit of assignment. In terms of coping strategies used during the pandemic, the study revealed that nurses' most used coping strategies were planful problem solving and seeking social support, while their least used was escape-avoidance coping. Based on the results, the study recommended that nurses use adaptive coping such as planful-problem solving to maintain their low burnout and general wellbeing. Furthermore, policymakers and nurse leaders need to continue providing a positive, healthy environment with adequate resources, incentives, and other fringe benefits to maintain nurses' high standard of performance. Nonetheless, the results are not generalizable because of the limited sample size. Therefore, future researchers should consider larger sample size and utilize a probability sampling method to make accurate generalizations.

**Keywords** Burnout, Job performance, Nurses, COVID-19 pandemic

## 1. Introduction

For decades, the prevalence of psychological issues associated with disease outbreaks remained broadly unchanged; however, with the emergence of the COVID-19 pandemic, this trend abruptly shifted. The COVID-19 virus wreaked havoc on humanity in December 2019, rapidly spreading worldwide and affecting people in over 210 countries and territories (Khan, 2020). COVID-19 was announced as an international pandemic by the WHO on March 11, 2020, indicating that an infectious disease has

spread widely worldwide (Pooladanda et al., 2020). The World Health Organization (WHO, 2020) reported more than 43 million COVID-19 cases and over 1 million deaths worldwide between December 2019 and October 2020, with the majority of cases (55%) occurring in America, followed by Europe (23%), and 35,000 cases occurring among global health care workers. At that point, the Philippines' Department of Health reported more than 300,000 confirmed COVID-19 cases and over 7,000 deaths (Kahambing & Edilo, 2020).

Aside from the lives claimed by COVID-19, preliminary evidence showed that the infection's widespread uncertainty and stay-at-home orders, quarantine, social isolation, curfew measures, and other imposed restrictions had a profoundly negative impact on the population's overall wellbeing and psychological health, increasing fear and panic, stress,

\* Corresponding author:

blesslovenimako18@gmail.com (Blesslove Pinamang Nimako)

Received: Feb. 5, 2022; Accepted: Feb. 22, 2022; Published: Mar. 15, 2022

Published online at <http://journal.sapub.org/nursing>

anxiety, emotional exhaustion, depression, and suicidal ideation, among others (Hu et al., 2020; Matsuo et al., 2020).

Per the World Health Organization (2020), the upsurge in COVID-19 cases in the health sector not only resulted in a sudden intercontinental demand for hospitalization and healthcare services but also overburdened the healthcare system and its significant stakeholders, posing overwhelming threats to health resources, patient outcomes, healthcare professionals' experience of burnout, affecting their performance, and productivity.

Health care professionals are at the forefront of the response to a global infectious disease pandemic and, as such, are at risk of infection (Wilkason et al., 2020), such as the COVID-19 outbreak. The World Health Organization (2020) indicated that healthcare professionals directly in contact with patients are at the most significant risk, mainly physicians and nurses. As the borderline of healthcare delivery and the hospital's largest population, nurses are vulnerable to many workplace hazards (Walton & Rogers, 2017).

Wang et al. (2020) attested that particularly nurses are at the greater risk of infection during an outbreak of infectious diseases such as COVID-19 due to the need for prolonged periods of close contact, long hours of working on both infected and non-infected patients, and shortage of personal protective equipment (PPE). As they deal with patients, families, organizations, and society as a whole, nurses execute between 50% and 80% than other healthcare professionals worldwide, so many researchers consider nursing a demanding and challenging career (Eslami Akbar et al., 2017; Labrague & De Los Santos, 2020).

Dr. Herbert Freudenberger first established the term 'burnout' in the 1970s and defined it as a long-term reaction to constant emotional and interpersonal stresses at work (Freudenberger, 1974). Recently, the World Health Organization declared burnout as an "occupational phenomenon" in the 11th revision of the International Classification of Diseases (ICD-11) and defined it as a condition conceptualized due to persistent pressures in the workplace that workers do not handle effectively (Woo et al., 2020).

The high incidence of burnout among nurses, particularly staff nurses working in the hospital setting, has been reported in several previous studies around the world on different continents, comprising Europe, America, Asia, and Africa (Elbarazi et al., 2017; Putra, 2019; Hu et al., 2020). In a previous study conducted by Woo et al. (2020), the overall pooled-prevalence of burnout symptoms among global nurses was 11.23% against the United States previous 34-45% (Dyrbye et al., 2018).

Matsuo et al. (2020) also found a 46.8% prevalence rate of burnout among nurses in Japan, whereas Hu et al. (2020) reported a similar finding in a large-scale cross-sectional where most frontline nurses reported moderate to high job burnout levels during the COVID-19 outbreak in China. However, there are limited data regarding the overall prevalence of burnout in the Philippines, even though Lu

(2017) revealed that of 246 nurses, nearly half missed work due to illnesses.

Many researchers believe that the incidence of nursing burnout is exceptionally high because of the high emotional and physical demands of nursing practice (Riedl & Thomas, 2019; Fasbender et al., 2019). High levels of burnout are associated with heavy workloads, nursing shortages, long working hours (Nimako, 2021), conflicts with physicians and patients, repeated exposure to disease and death, insufficient staffing, conflicting views, unpredictability, inadequate pay, low work atmosphere (e.g., lack of power, lack of administrative support) and job dissatisfaction (Muriithi et al., 2016; Hoff et al., 2019).

In terms of moderating factors on burnout, previous studies report inconsistent findings. Qu and Wang (2015) contended that nurses with less than five years of working experience, experience a higher burnout level, a finding supported by Kim and Yeom (2018). Mahmoudi et al. (2020) also found that nurses in surgical and medical wards experience higher burnout. On the contrary, Yektatab et al. (2019) found no significant association between occupational burnout and nurses' assignment unit.

Oliveira et al. (2019) declared that nurses who have effective coping mechanisms to job stress experience low burnout in their workplace and tend to deliver holistic care to their patients and perform their duties well and frequently at work. Fares et al. (2016) define coping as efforts to minimize or remove the adverse effects of stress and burnout on an individual's wellbeing. However, when nurses are unable to cope with high job stress, it results in burnout, which has implications on medical care quality, patient satisfaction, higher health-related infections, and increased patient mortality rates (Hall et al., 2016).

Previous research in the United States, the United Kingdom, and the Netherlands have recorded low-performance prevalence rates ranging from 0.5% to 12% among health care professionals (van den Goor et al., 2020; Donaldson et al., 2014). Sony and Mekoth (2016) define job performance as the effectiveness of an individual in carrying out his or her direct roles and responsibilities in patient care and as a means of achieving a goal or collection of goals within a task, place, position, or organization.

Job performance is typically a multifaceted phenomenon with many variables influencing its levels, such as individual characteristics, workload, job satisfaction, working environment, personal skills, acknowledgment of accomplishments, and social support (Lee & Yom, 2015; Olsen et al., 2017; Yu & Ko, 2017). Furthermore, open communication and feedback, leadership behavior, organizational environment, affective commitment, poor working conditions, and hazards influence job performance (Sharma & Dhar, 2016; Kaynak et al., 2016).

Apex- Apeh et al. (2020) found that nurses' years of working experience affect nurses' job performance, a finding similar to the results of Fujino et al. (2015) and Osei et al. (2019). Nonetheless, Al-Makhaita et al. (2014) found no difference in job performance based on nurse experience.

Also, previous research shows that nurses who are burnt out are less willing to lead and more likely to leave their jobs (Hosseini et al., 2017; Liu et al., 2018; Al Sabei et al., 2019). However, few studies have examined the possible effect of burnout on nurses' job performance in some countries and care settings (Li et al., 2017).

Regarding the association of burnout and performance, one study of 812 American nurses reported that nurses who experience high burnout levels are more likely to be absent for one or more days, have poor work performance, or perform low in assigned nursing tasks (Dyrbye et al., 2019). Another study of 100 mental nurses working in Iran also found a negative correlation between burnout levels and nurses' job performance, where nurses with high burnout provided poor nursing care (Farhady et al., 2009). Hosseini et al. (2017) also reported similar findings. Moreover, in another study of 81 mental nurses working in Malaysia, emotional exhaustion and depersonalization predicted low job performance (Abdullah & Yuen, 2011).

Ross (2020) postulated that burnout among nurses during the COVID-19 pandemic is a problem in developed and developing countries and likely to influence their intentions of leaving the profession or missing nursing tasks, which would affect nurse and patient outcomes. Since the emergence of the COVID-19 pandemic, many studies have been conducted and reported, navigating the impact of the outbreak of the disease on the health and wellbeing of health care professionals (Luceño-Moreno et al., 2020; Matsuo et al., 2020). However, studies supporting the relationship between burnout and job performance among nurses during the COVID-19 pandemics are inadequate.

Significant limitations of previous works of literature include studies being conducted more than a decade ago and outside the Philippines, nurses from a single specialty (mental health nurses), using the old Maslach burnout inventory and before the COVID-19 outbreak (Farhady et al., 2009; Abdullah & Yuen, 2011; Dyrbye et al., 2019). There are currently limited studies on burnout and job performance of nurses in the Philippines.

Therefore, it was relevant to conduct similar studies in the Philippines and establish the relationship between these phenomena among nurses in other specialties such as the adult care setting using other tools such as the Copenhagen Burnout Inventory. Hence, the study aimed to determine burnout, the level of nurses' job performance in adult care settings during the COVID-19 pandemic, and the relationship between burnout and job performance.

This study offered nurses a unique view of their burnout, performance, and coping strategies used to combat extreme workplace stressors in nursing practice. Nurses in other institutions can use this study to develop strategies to combat the extreme stress and burnout associated with nursing services. Moreover, policymakers can pay attention to the various measures highlighted in this paper and implement interventions in their respective facilities to help eliminate nurse burnout and improve job performance, particularly during pandemics.

In terms of nursing education, the findings of this study guide nursing faculty and nurse educators in highlighting to student nurses the various adaptive coping strategies they can employ when facing extreme pressures after becoming staff nurses in the future to help them cope effectively.

In terms of nursing research, this study's results provide information on the limited knowledge of nurses' burnout and job performance in the Philippines, and limitations of the study serve as a basis for other related studies. Future researchers can also draw upon the results of this study while developing and testing burnout reduction programs through pretest and post-test measures for more effective stress and reductive burnout measures.

## 2. Research Questions

Specifically, the study answered the following questions;

1. What is the level of burnout of nurses in adult care settings during the COVID-19 pandemic?
2. What is the level of job performance among nurses in adult care settings during COVID-19 pandemics in terms of;
  - a) Leadership
  - b) Critical care
  - c) teaching/ collaboration
  - d) planning/ evaluation
  - e) Relations/ communication
  - f) personal development
3. What is the relationship between burnout and nurses' job performance in adult care settings during the COVID-19 pandemic?
4. Is there a significant difference in nurses' burnout level in adult care settings during the COVID-19 pandemics when grouped according to; a) Years of working experience b) unit of assignment?
5. Is there a significant difference in the level of job performance during the COVID-19 pandemic when they grouped according to; a) Years of working experience b) unit of assignment?
6. What are the nurses' coping strategies during COVID-19 pandemic?

### Null Hypothesis

1. There is no significant relationship between burnout and nurses' job performance in adult care settings during the COVID-19 pandemic.
2. There is no significant difference in burnout when considering nurses' years of working experience and unit of assignment.
3. There is no significant difference in the level of job performance when considering nurses' years of working experience and unit of assignment.

## 3. Theoretical Framework

In the context of this study, Betty Neuman's systems

model was used as a framework to guide the investigation in determining the relationship between the two main variables – burnout and nurses' job performance (Neuman, 1996). Neuman (1996) described the individual as a client or client system, a complex interrelation system that responds to environmental stressors and is made up of physiological, psychological, sociocultural, developmental, and spiritual variables that can be an individual, a family, a group, or a social problem. In the present study, the nurse was the client.

Neuman (1996) identifies the environment as all internal and external influences that, at any given time, affect or influence the client or client system. Based on Neuman's assertion, the client system in the model is made up of a basic or core structure that is protected by lines of resistance. The usual health level is identified as the normal line of defense protected by a flexible line of defense.

Stressors are intra-, inter-, and extra personal in nature and arise from the internal, external, and created environments. Intrapersonal stressors during the COVID pandemic include fear of contracting COVID-19, feeling of loneliness, being a caregiver, witnessing deaths, feeling of weariness, home-work imbalance, feeling of weariness after long working hours, etc. (Tee et al., 2020).

Interpersonal stressors also include loss of loved ones, mass casualty, poor working relationship, lack of support and feedback, uncooperative patients and family members, workplace tension, poor working relationships with colleagues, lack of support and constructive input from senior nursing workers, etc. (Duarte et al., 2020). Lastly,

extra personal stressors include inadequate PPEs, quarantine and social isolation, extreme exposure to COVID-19 details, emergency cases, excessive workload, limited resources, limited control, reduced staff, high or excessive workload, long working hours, limited resources, and unfamiliarity with conditions, etc. (Wu et al., 2020).

According to Neuman (1996), when these stressors break through the flexible line of defense, the system is invaded, and the lines of resistance are activated. Here, if adequate energy is available or when the flexible line of defense reduces, removes, or avoids stressors, the normal defense line cannot be disrupted and changed, resulting in the nurse's/general wellbeing experience (Turner & Kaylor, 2015).

On the contrary, if stressors effectively reach the nurse's flexible defense line and change the normal defense line, the nurse's coping mechanism and stress response pattern activate to restore the nurse's health and wellbeing. (Turner & Kaylor, 2015). Here, the system will be reconstituted with the normal defense line restored at, below, or above its previous level. However, if stressors break through the lines, there is a reaction such as burnout, which influences the nurses' performance.

Previous studies have found a strong relationship between burnout and poor performance outcomes (Dyrbye et al., 2019; Hosseini et al., 2017). Khamisa et al. (2017) also posited that prolonged exposure to stressors results in poor outcomes such as burnout, associated with low or poor job performance.

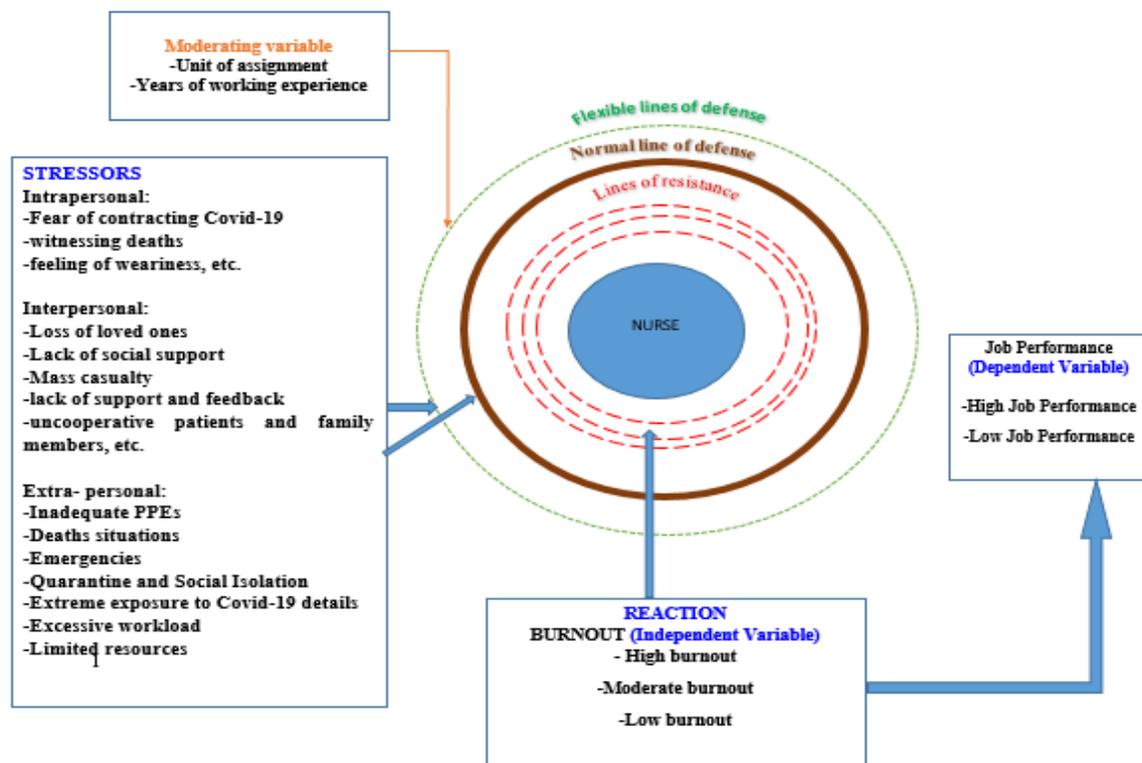


Figure 1. Neuman's System Model adapted for burnout and job performance of nurses

## 4. Methodology

This quantitative study utilized a descriptive correlational design. Using purposive sampling, the study included 84 nurses employed in a selected private hospital in Baguio City, Philippines. The respondents' inclusion criteria were a) a nurse employee at the selected hospital, b) Head nurses, supervisors, and staff nurses working in adult care settings and e) nurses who will give their consent. Exclusion criteria: a) float nurses who were currently working in pediatric, OB-Gyne units, and special care unit (nursery) who previously worked in medical wards, palliative units, surgical wards, emergency units, or critical care units, b) a float nurse in an adult care setting, not a regular staff of the unit but previously worked in non-adult care settings.

Table 1 presents the study's socio-demographic characteristics, including respondents' gender, age, assignment unit, and years of clinical experience. Response rate in this study was 90.3% indicating 84 respondents. Out of the 84 respondents, 67 (79.8%) were females, and 17 (20.2%) were males. Their ages ranged from 21- 30 years 50 (59%), 31- 40 years, 29 (34.5%), and above 41 years were 5 (6%). Furthermore, most of the respondents, 17 (20.2%), worked in the emergency and triage units, and the least, 9 (10.7%), worked in the Palliative wards and PR Annex. The majority of respondents, 53 (63.1%), had 1-4 years of working experience, 24 (28.6%) had 5-9 years working experience, and 7 (8.3%) respondents had above ten years of working experience.

**Table 1.** Socio-Demographic Profile of Respondents

Demographic	Frequency	Percent
<b>Age</b>		
21-30 years	50	59.5
31-40	29	34.5
41+	5	6
<b>Sex</b>		
Female	67	79.8
Males	17	20.2
<b>Clinical Area</b>		
Emergency and Triage	17	20.2
Intensive Care (Med, Surg, Neuro)	13	15.5
Medical Unit	16	19.0
Surgical/ Isolation Unit	16	19.0
Operating Room	13	15.5
Palliative and PR Annex	9	10.7
<b>Working Experience</b>		
1-4 years	53	63.1
5-9 years	24	28.6
10+ years	7	8.3
<b>TOTAL</b>	<b>84</b>	<b>100</b>

To determine the level of burnout, the study adopted the Copenhagen Burnout Inventory, a standardized tool developed by Kristensen et al. (2005) with a Cronbach alpha of .85- .87, which comprise three dimensions and 19 items;

personal (measured by items 1,2,3,4,5 & 6), work-related (measured by 7,8,9,10,11 & 12.) and client-related burnout (measured by 13,14,15,16,17 & 18), which is rated using a 5-point Likert scale. The tool yielded a high reliability in the present study with an overall Cronbach's alpha of 0.798.

To measure job performance level, the study also adopted the Schwirian Six Dimensions of Nursing Performance Scale (SDNS), a standardized tool developed by Dr. Patricia M. Schwirian, with an overall Cronbach's alpha of 0.97 which was rated using a 4-point Likert scale. The Six Dimensional Job Performance Questionnaire consists of six sub-scales and 52 items. The sub-scales include leadership (5 items), critical care (7 items), teaching/ collaboration (11 items), planning/ evaluation (7 items), interpersonal relations/ communications (12 items), and professional development (10 items). In the present study, the tool yielded high reliability with an overall Cronbach's alpha of .939 for the performance tool.

For coping strategies used during the pandemic, the researcher developed semi-structured questions based on Folkman and Lazarus' (1984) Transactional model of stress, which comprised six coping strategies: planful problem solving, seeking social support, and confronting accepting responsibility, distancing and escape- avoidance.

**Table 2.** Scoring system for burnout

Numerical Scale	Scale Average Weight	Scaled Response	Qualitative Descriptor
5	4.2- 5.0	Always	Very High Burnout
4	3.4-4.19	Often	High Burnout
3	2.6-3.39	Sometimes	Moderate Burnout
2	1.8-2.59	Seldom	Low Burnout
1	1-1.79	Never	Very Low Burnout

**Table 3.** Scoring system for Job Performance

Numerical Scale	Scale Average Weight	Scaled Response	Qualitative Descriptor
4	3.25-4	Very well	Very High performance
3	2.5-3.24	Well	High performance
2	1.75-2.49	Satisfactorily	Low performance
1	1-1.74	Not very well	Very Low performance

Before commencing the study, ethical clearance was obtained from Saint Louis University's Ethics Review under the **protocol number SLU- REC 2021- 006**. The following ethical principles guided the study; to do good (beneficence), to do no harm (non-maleficence), privacy, confidentiality, anonymity, and veracity. Once the hospital granted permission, the researcher met the prospective respondents who met the requirements of the inclusion criteria and solicited their cooperation after a thorough explanation of the study's purpose and procedures.

After obtaining informed consent from the nurses, questionnaires were floated among them and allotted a reasonable time to answer at their own convenient time

and place. The researcher collected the papers and counter-checked to confirm that all items on the questionnaire were answered entirely. The exact process took place until the completion of the sample size. Data collection commenced on May 5, 2021, and ended on May 28, 2021, while adhering to all COVID-19 protocols to prevent the spread of infection using appropriate PPEs.

No direct benefits or incentives were allocated to respondents to coerce them into participating in the study. Participation was solely voluntary, and they could decline or withdraw from the study at any time without penalty. The study was safe and benefitted respondents by allowing them to self-evaluate their burnout and performance while posing no physical, psychological, social, legal, or economic risks. Scientifically, the study provided nurses and the nursing field with valuable, meaningful, and valid information on nurse burnout, job performance, and coping strategies.

The study used both descriptive and inferential statistics to analyze the data. With the assistance of a research statistician, data were analyzed using the Statistical Package for Social Services (SPSS) version 22. Research questions one and two, the level of burnout and job performance, were analyzed with descriptive statistics using mean and standard deviation. The study used Pearson correlation to analyze question three, the relationship between burnout and job performance. ANOVA analyzed questions four and five, the significant differences in burnout and performance when considering nurses' years of working experience and assignment units.

The study utilized descriptive statistics for question six, using frequencies to rank the nurses' coping strategies. Cohen (1998) used absolute correlation values in evaluating the strength of the relationship, where  $r=.10$  to  $.29$  means weak,  $r=.30$  to  $.49$  means moderate, and  $r=.50$  to  $1.0$ , meaning high; were used.

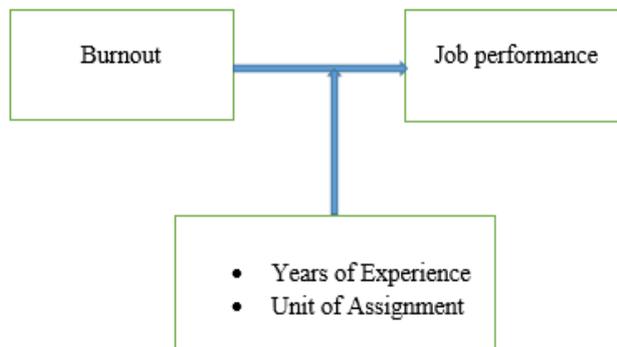


Figure 2. Conceptual Framework for Burnout and Job performance

### 5. Results and Discussion

The study sought to investigate the level of burnout, job performance, and the relationship between the phenomena among nurses in adult care settings, and the influence of variables such as years of working experience and unit of assignment to the mentioned dependent variables. The study

also discusses the coping strategies nurses use during the COVID-19 pandemic.

Table 4. Level of Burnout among Nurses in the Adult Care Settings during COVID- 19 Pandemic

Domains	Mean	Interpretation
Personal burnout	2.6244	Moderate
Work-related burnout	2.2897	Low
Client-related burnout	2.0337	Low
<b>Overall</b>	<b>2.3159</b>	<b>Low</b>

Legend:

4.2-5 Very High    2.6- 3.39 Moderate    1.80-2.59 Low  
 3.4-4.19 High    1.00- 1.79 Very Low

Table 4 presents the level of burnout among nurses in the adult care settings during the COVID- 19 pandemic. The results revealed an average mean of 2.3159, which means a low burnout level. A low burnout refers to minimal physical, emotional, and psychological exhaustion, and the respondents have a sense of effectiveness and can function productively physically and psychologically with minimal difficulty and cope in stressful situations. The table further shows the mean score of personal burnout with a mean of 2.6244, a qualitative descriptor of moderate burnout, and a mean of 2.2897 and 2.0337 for work-related and client-related, respectively, a qualitative descriptor low burnout in those two domains. This low burnout may be due to the coping mechanisms they learned during college and through practice. Also, as part of the workforce, nurses learn to adapt to everyday stresses brought by work, especially during this pandemic.

The likelihood of burnout in the COVID era steadily increases with different facets, such as environment, working conditions, coping, resources, etc. Since the nursing profession is deemed stressful, particularly during the pandemic, burnout is predicted to be high, contrary to the researcher's finding. However, studies on adaptation and coping among nurses have revealed several significant findings (Suzuki et al., 2021). Notably, nurses in this study reported using positive, problem-focused strategies, the coping that is considered the most effective strategy to deal with stressors. Furthermore, the study found that nurses seek social support when they encounter stressors. According to Abravani and Gharibzadeh (2020), this has a significant inverse correlation with burnout.

Alternatively, as a Catholic institution, an interview with some of the responding nurses indicated that the hospital engages its staff in routine short prayers between and within shifts, which help reduce their anxiety at their workplace. Polat et al. (2020) affirmed that religious coping helps nurses find meaning beyond themselves and their clinical practice during the COVID-19 pandemic, thus, reducing their stress, anxiety, and burnout.

Cho and Han (2018) posited that an unhealthy work environment and inadequate resources contribute to high burnout among nurses. Even though nurses in the present study are moderately burned out personally, this did not

manifest in their work and client-related burnout, possibly because of external factors within their work environment that mitigate the stress associated with their work on patients. During the data gathering, the researcher observed that the hospital has a high cleanliness standard that ensures the optimum health and safety of patients, visitors, and healthcare workers.

The hospital has a decent working environment with an excellent working play layout, high-quality infrastructure, standardized facilities, operable and modern tools technology that facilitates effective nursing care to reduce unnecessary tension, injuries, stress, and anxiety. Particularly during the COVID period, the facility provided a safe and hazard-free environment with sufficient personal protective equipment (PPEs), infection control guidelines, and basic supplies, reducing work pressures associated with nursing procedures.

In a previous study, Ali et al. (2020) found that about 82% of Alabama nurses who experienced high burnout mostly complained of fear of being infected by the COVID-19 virus, inadequate PPEs, inadequate tools, and equipment. In this study, the researcher observed that together with the provision of resources, the hospital had instituted policies and modules that enforced COVID-risk management, such as the “no mask-no entry” policy and social distancing to protect patients, visitors, and health care workers, and this may have eased the nurses’ tension, anxiety, and fear of contracting the disease.

Al Sabei et al. (2020) highlighted that demanding workload, insufficient nursing staff, and lack of support contributed to extreme stress and nurse burnout during the COVID era. Contrary to the previous study, an interview with some nurses in this study suggested that the hospital’s man pooling during the pandemic facilitated nurses’ allocation to cover the current extensive workload. That is, the hospital was not understaffed, and less workload was given to the nurses individually, which reduced pressure related to nursing care.

Aside from this, the availability of nursing aides in the facility help with the provision of patients’ basic care and other procedures at work. In addition, nurses in the institution also receive maximum support from other healthcare workers such as interns, clerks, and doctors. This team-based care within the facility enables the nurses to work interdependently to reduce constraints in their healthcare delivery, which reduces their burnout.

Previous literature indicated that high burnout was linked to long working hours, rigid work schedules, and demanding workloads (Ali et al., 2020; Hu et al., 2020). However, some responding nurses in an interview mentioned that their nursing leaders and head nurses created favorable conditions that prevent or reduce burnout by delegating meaningful tasks and goals, flexible work schedules, shifts, and working hours with planned breaks for their nurses, especially during the pandemic. Some of them also indicated that the pandemic did not cause a major significant change in their shifts or working schedules as

previously. This healthy work culture lessened the stress or strain related to their nursing care.

Other factors which may have reduced the nurses’ burnout include the functional team, strong interpersonal relationships, and collaboration among the nurses and other healthcare workers. In Iheduru-Anderson (2021) study, functional teamwork among nurses reduced their burnout drastically. During the data-gathering period, the researcher observed that interactions among nurses in the hospital were done with mutual understanding and respect. Nurses in the hospital cooperate reasonably with coworkers, nursing aides, nursing administrators, and interprofessional teams to provide holistic care without feeling pressed or overburdened, reducing their burnout, as demonstrated by their high interpersonal relation performance in the study.

Contrary to this study, previous studies conducted at the earliest wave of the pandemic reported moderate to high burnout among nurses (Abdelhafiz et al., 2020; Dinibutun, 2020; Hu et al., 2020). This study’s results imply that burnout can be reduced when nurses use positive coping mechanisms and appropriate organizational measures are put in place. Therefore, the hospital should continue to create a safe, conducive, and positive work environment for its nurses while using their effective coping mechanisms.

**Table 5.** Level of Job Performance among Nurses in the Adult Care Settings during Covid- 19 Pandemic

Domains	Mean	Interpretation
Leadership	3.054	High
Critical care	3.292	Very high
Teaching and Collaboration	3.083	High
Planning and Evaluation	3.248	High
Interpersonal and Communication	3.248	High
Professional Development	3.337	Very high
<b>Overall Mean</b>	<b>3.210</b>	<b>High</b>

Legend:

3.25-4 Very High      1.75-2.49 Low  
2.5-3.24 High      1.00- 1.74 Very Low

Table 5 presents nurses’ job performance in adult care settings during the COVID-19 pandemic. The results revealed an average mean of 3.210, with a qualitative descriptor of high job performance. A high job performance means that nurses execute a set of nursing activities or behaviors directed towards the recovery and wellbeing of the patients to a high standard. The table also shows that leadership was high, with a weighted mean of 3.054. Critical care was very high, with a mean of 3.292. Teaching and collaboration were also high, with a mean of 3.083, whereas planning and evaluation (3.271), interpersonal relationship and communication (3.248), and professional development (3.337) were very high. Contrary to this study, Dyrbye et al. (2019) found that 43.8% of American nurses had low performance. However, there are several possible explanations for this study’s result.

Job performance is a multifaceted phenomenon that is influenced by a variety of factors. Liyew et al. (2020)

argued that poor knowledge and skills predict low performance. However, this is not seen in this study since, as a private organization, the hospital hires knowledgeable, skillful, competent, committed nurses with a positive attitude who deliver high-quality care.

Bender et al. (2019) also cited the lack of incentives as a significant factor in low nurse performance. A possible explanation for the high performance of nurses in this study is the incentives and fringe benefits the hospital provides. An interview with some nurses indicated that these financial incentives motivate them to provide quality nursing care to clients and their significant others. In addition, other non-financial incentives such as access to sufficient resources avoid unnecessary interruptions, missed care, or delays that impede efficient care delivery. Johansen et al. (2021) found that inadequate equipment is one of the most significant barriers in the nursing environment, which leads to missed care or delay in nursing care delivery and low performance.

Abi Hussein (2019) also argued that ineffective communication and poor interprofessional relationships affected performance. However, nurses in the current study have solid interpersonal relationships, as confirmed by their high interpersonal relations and communication performance. Their strong interpersonal relationships facilitate effective coordination and collaboration with patients and their families, physicians, and other healthcare professionals to provide efficient nursing care, as evidenced by the high interpersonal relations and communication performance.

Another factor influencing poor nurse performance is poor leadership styles and practices (Zaghini et al., 2020). This study found that head nurses in the hospital have a high leadership performance. With good leadership practices and healthy work culture, nursing leaders, supervisors, and head nurses consistently provide supportive supervision and feedback on performance appraisal to their nurses, ensuring that they adhere to all organizational norms and provide high-quality patient care.

Overall, it can be concluded that nurses in the present study are motivated and challenged to use their knowledge, skills, and clinical expertise to perform productive nursing care due to their excellent knowledge, high competency, positive work attitudes, the availability and supply of resources, healthy work environment, favorable conditions, and leadership practices.

Table 6 presents the relationship between burnout and job performance among nurses in the adult care setting during the COVID-19 pandemic. Based on the statistical result ( $r = -.340, p = .002$ ), there is a significant moderate negative relationship between burnout and job performance at 0.01 level, implying that as burnout increases, job performance decreases—inversely related, as burnout decreases, job performance increases. Hence, the study rejects the null hypothesis that states that there is no relationship between burnout and job performance among nurses in the adult care settings during the COVID-19 pandemic. This result

corroborates the Neuman system model, which emphasized an inverse relationship between burnout and nurse performance.

**Table 6.** The Relationship between Burnout and Job Performance among nurses

		Burnout	Job Performances (Overall)
Burnout	Pearson Correlation	1	-.340**
	Sig. (2-tailed)		.002
	N	84	84
Job Performances (Overall)	Pearson Correlation	-.340**	1
	Sig. (2-tailed)	.002	
	N	84	84

\*\* . Correlation is significant at the 0.01 level (2-tailed).

According to Neuman (1996), when individuals successfully manage or deal with their inter-personal, intra-personal, and extra-personal stressors, they achieve high psychological, social, and emotional wellbeing that enables them to perform their roles and responsibilities productively with less difficulty. However, if they cannot manage their stressors, they perform poorly.

Dyrbye et al. (2019) claimed that nurses who experience high burnout levels are more likely to be absent for one or more days, have poor work performance, or perform low in assigned nursing tasks. Previous studies show that burnout has the most substantial relationship to low job performance, influencing factors such as low salary, poor coordination, ineffective communication with colleagues, etc. (Gozum, 2020).

Similar to this study, Zaid (2019) found a negative relationship between burnout and nurse performance. Dyrbye et al. (2019) also found that nurses with high burnout had low job performance and productivity. The present study's results affirm that organizational investment in strategies to reduce burnout among nurses influences their performance and productivity positively, as discussed in previous literature (Cho & Han, 2018).

**Table 7.** The Difference in the Level of Burnout when Considering Years of Working Experience

Years of Working Experience	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.346	2	.173	1.417	.248
Within Groups	9.889	81	.122		
Total	10.235	83			

Legend:

4.2-5 Very High      2.6- 3.39 Moderate      1.80-2.59 Low  
 3.4-4.19 High                1.00- 1.79 Very Low

Table 7 shows the difference in the level of burnout among nurses in the adult care settings during the COVID-19 pandemic when considering years of working experience. In determining this, the study performed a one-way between-group analysis of variance. The study grouped

respondents into three groups 1-4 years (53), 4-9 years (24), and ten years and above (7). Using ANOVA, no statistically significant difference was found between years of working experience and overall burnout at  $p < 0.05$  for the three groups:  $F = 1.417$ ,  $p = .248$ . Hence, the null hypothesis stating that there is no significant difference in the level of burnout when respondents are grouped according to the nurses' years of working experience is accepted.

Kim and Yeom (2018) posited that nurses with less than five years of working experience encounter extreme stress and higher burnout than those with more than five. Nonetheless, this is not seen in the present study since an interview with the nurses showed that all responding nurses received training on COVID-risk management at the emergence of the COVID disease. The study also showed that these nurses have a robust support system within the facility, especially during these pressing times.

In the era of the COVID pandemic, both senior and junior nurses worked cordially with trust and respect amongst themselves and provided emotional and informational support for one another while receiving optimum support from their leaders. Previous studies show that care coordination among senior and junior nurses reduces burnout irrespective of the years of working experience (Gozum, 2020). This study's result is similar to Luan et al. (2017), which concluded that burnout is transverse among all nurses.

**Table 8.** The Difference in the Level of Burnout when Considering unit of assignment

Burnout					
Considering unit of assignment	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.981	5	.196	1.654	.156
Within Groups	9.254	78	.119		
Total	10.235	83			

Table 8 presents the difference in burnout among nurses in the adult care settings during the covid-19 pandemic when considering the unit of assignment. Units of the assignment units were categorized into six in this study. With the use of ANOVA, no statistically significant difference was found between the unit of assignment and overall burnout at  $p < 0.05$  level for the six groups:  $f = 1.654$ ,  $p = .156$ . Hence, the null hypothesis stating that there is no significant difference in burnout when respondents are grouped according to the nurses' units of assignment is accepted.

In contrast to this study, McDermid et al. (2021) discovered that nurses in critical care units reported higher burnout levels than those in other units due to lack of equipment and insufficient skilled personnel during the COVID crisis. Kim et al. (2020) also found that nurses in the emergency unit experience higher burnout than those in other departments due to heavy workloads. However, this is not seen in the study since all the nurses have equitable distribution of human and non-human resources.

The creation of positive work culture in all departments in

the facility throughout the COVID period, for example, their equitable access to equipment in all units, fairness in work schedules, incentives, benefits, etc., contributed to favorable conditions for all the nurses, hence, the insignificant results. McDermid et al. (2021) highlighted that institutions with inequitable distribution of resources might subject nurses in specific departments to report higher burnout than others. Moreover, through an interview, some nurses revealed that nurse leaders in the organization facilitated cross-departmental communication during the pandemic, which bridged gaps between policies, practices, and departments, reducing stress and burnout among all nurses.

**Table 9.** The Difference in the Level of Job Performance when Considering Years of Working Experience

ANOVA					
Years of Working Experience	Sum of Squares	Df	Mean Square	F	Sig.
Job Performance					
Between Groups	.209	2	.104	1.830	.167
Within Groups	4.624	81	.057		
Total	4.833	83			

Table 9 presents the difference in job performance among nurses in the adult care settings during the COVID-19 pandemic when considering years of working experience. Results showed no statistically significant difference, using ANOVA at  $p < 0.05$  for the three groups:  $F = 1.830$ ,  $p = .167$ . Hence, the null hypothesis stating that there is no significant difference in the level of job performance when respondents are grouped according to the nurses' years of working experience is accepted.

This study confirms Al-Makhaita et al. (2014), who averred that nurses generally perform their jobs irrespective of their years of clinical experience. Other factors may influence job performance other than years of working experience, such as professional skills, perception, values. In this study, all nurses in the three categories had the same job performance because they are all competent, well-qualified nurses hired by the institution.

It is also worth stating the hardworking, hospitable, service-oriented, and productive traits of responding nurses in the present study, which fuels their passion and desire, especially during these pressing times, to put in the necessary effort to deliver safe and efficient care. Hence, regardless of their care setting, they perform their jobs well. Cui et al. (2020) acknowledged that nurses' loyalty toward their profession during the COVID-19 pandemic may have stemmed from their desire to fulfill their professional commitments, which improve work quality and job satisfaction and reduce job stress and turnover.

In contrast to this result, Apex- Apeh et al. (2020) and Pourteimour et al. (2021) found that nurses with five years of working experience had a high job performance during the COVID-19 pandemic. Osei et al. (2019) support the results of this study. The results imply that planning interventions to

sustain high performance should be considered among nurses across all years of working experience.

**Table 10.** The Difference in the Level of Job Performance when Considering Unit of Assignment

Unit of Assignment	ANOVA				
	Sum of Squares	Df	Mean Square	F	Sig.
Job Performance					
Between Groups	.434	5	.087	1.540	.187
Within Groups	4.399	78	.056		
Total	4.833	83			

Table 10 presents the difference in nurses' job performance when considering the assignment unit. The results showed no statistically significant difference, with the use of ANOVA, at  $p < 0.05$  level for the six groups:  $F = 1.540$ ,  $p = .187$ . Hence, the null hypothesis that states that there is no significant difference in the level of job performance when respondents are grouped according to the nurses' units of assignment is accepted.

Contrary to this result, Al-Makhaita et al. (2014) found that nurses in the surgical department performed better than nurses in other units. Regardless of unit of assignment, all nurses in this study reported the same job performance, possibly because of the institution's adequate supervision and support of the nursing services. Nuritasari et al. (2020) found that all nurses reported higher performance in their departments because of strict clinical supervision.

Additionally, an interview with several nurses revealed that they are bound by the hospital's code of ethics and legal responsibilities, which require them to perform well and provide quality care to their clients in their various clinical departments or units. The hospital has a well-defined mission, goals, and core values that mandate nurses and other professionals to prioritize their patients and provide the highest-quality, compassionate care in their professional capacity while holding themselves accountable for their behaviors.

Watmanlussy et al. (2020) specified that nurses have a set value of integrity, which guides them to work together as a whole with others to benefit everyone involved. In terms of organizational measures, the hospital provides each unit with adequate resources, tools, and materials needed to carry out nursing tasks. Hence, all the nurses reported the same level of performance.

This result implies that nurses can have high performance in a healthy work environment regardless of the assigned unit. Therefore, planning interventions to sustain high performance should consider all nurses and department units.

Table 11 presents nurses' coping strategies during the COVID-19 pandemic. Using descriptive statistics frequency, coping strategies had six domains from which the highest used coping strategy was planful problem solving (60.7%), followed by seeking social support (53%) and accepting

responsibility (33.3%). 26% and 20.2 % of respondents used distancing and confronting coping, respectively, while the least used mechanism was escape avoidance (17.8%).

**Table 11.** Nurses Coping Strategies during COVID-19 pandemic

Domain	Frequency	Percentage
Planful problem solving	51	60.7%
Seeking Social support	45	53%
Confrontation	28	33.3%
Accepting responsibility	22	26%
Distancing	17	20.2%
Escape- Avoidance	15	17.8%

Nurses use various coping strategies to manage thoughts, feelings, and actions to maintain physical, mental, social, and spiritual wellbeing due to stress and burnout. Lazarus and Folkman (1988) defined coping as the cognitive and behavioral efforts to master, tolerate or reduce external and internal demands and conflicts. In a previous study, Rilveria (2018) declared that the people of the Philippines cope with highly stressful situations through cognitive reappraisal, problem-solving, religiosity, tolerance, social support, emotional release, over-activity, and relaxation or recreation.

In harmony with this study, AlJhani et al. (2021) reported common coping strategies Alabama nurses use to combat stress, including planful problem solving and seeking social. Problem-solving coping describes deliberate problem-focused efforts to alter the stressful situation, coupled with the analytic approach to solving the problem.

Bender et al. (2021) posited that during the stressful COVID pandemic, nurses seek emotional support in the form of love, care, trust, empathy, and other social support in all forms. Social support describes efforts to seek informational support, instrumental support, emotional support, and appraisal support. In this study, nurses' second-ranked coping was social support, probably because of its protective role on job stress and burnout. This supports Mariani et al. (2020), who stated that nurses' perceived family support was significantly related to reduced depressive and anxiety symptomatology during the COVID-19 pandemic.

In the present study, the least-used coping strategy was distancing and escape avoidance. Distancing is characterized by intellectual rationalization, attention switching, pulling away, humor, and depreciation from stressful situations. At the same time, escape avoidance describes wishful thinking and behavioral efforts to escape or avoid a problem or stressful situation (Del Castillo & Alino, 2020). To cope, people who use this type of coping turn to unhealthy lifestyles like smoking, drinking, and oversleeping, among others, hoping that the stressful problem will resolve on its own (Chen et al., 2020).

In the present study, 72.6% of responding nurses indicated relief when using their coping strategies, with 27.4% feeling unrelieved even after using various coping techniques. This finding confirms that of previous studies which established a

significant association between coping and nurse burnout (Baloran, 2020; Chen et al., 2020).

This study is in agreement with Folkman and Lazarus's (1988) assertion, which proposed the use of adaptive copings, such as cognitive and behavioral efforts (such as problem-solving, information seeking, seeking aid, and social support) to manage stressful conditions. According to Folkman and Lazarus (1998), the use of maladaptive coping (such as escape avoidance, distancing, disengagement, emotional numbing), a negative coping which can be harmful to an individual's wellbeing and exacerbate chronic stress, which eventually results in exhaustion and burnout.

## 6. Limitations of the Study

The study had some limitations; small sample size, purposive sampling, and the use of a self-rated job performance tool. As a result of the smaller sample size and selection bias, the findings of this study are not generalizable to all nurses. Another limitation is the response rate of only 90.3% due to lack of consent from some nurses unreturned and incomplete questionnaires due to certain unforeseen circumstances beyond the researcher's efforts.

## 7. Conclusions

The study concluded that, despite the chaotic conditions caused by the COVID-19 pandemic, nurses in adult care settings effectively manage their burnout experience. Furthermore, nurses productively execute their varied roles and responsibilities related to holistic nursing care and the quality of healthcare services during the COVID-19 pandemic. Burnout is a predictor of job performance. However, burnout and job performance are not influenced by nurses' years of work experience and unit of assignment during the COVID-19 pandemic. Nurses in adult care settings utilize adaptive coping strategies such as planful problem-solving and seeking social support.

## 8. Recommendations

Hospital policymakers should continue to provide a healthy, positive environment that supports nurses' wellbeing to maintain low work and client-related burnout, and resilience-oriented programs reduce personal burnout. Policymakers should continue to provide adequate financial and non-financial incentives to maintain nurses' high standards of job performance. Moreover, nurses should continue using adaptive coping such as planful problem-solving and seeking social support to cope with stressors.

Furthermore, nurses who use maladaptive coping such as avoidance and distancing should re-train their use of positive coping for personal and organizational growth. Future studies should consider a larger sample size, adopt a

probability sampling technique to generalize findings to the population, utilize an objective assessment tool to measure nurse performance, and researchers should devise strategies to ensure that their study gets a 100% response rate. Future researchers should consider using qualitative research design to explore these phenomena among nurses.

## ACKNOWLEDGEMENTS

I'd like to express my heartfelt gratitude to my research Advisor and Co-Author, Teresa N. Basatan, and my honorable panelists, Lawrence C. Caranto, Ph.D, RN, Jefferson S. Galanza, MSN, MPH, RN, and Emily Abad, MSN, RN, for their valuable contribution that helped make this study a success. Also, my sincere appreciation to the hospital administration for granting permission, as well as the nurses whose consent and cooperation resulted in a more meaningful and rewarding contribution to this piece.

## Conflicts of Interest

The researchers declare that there was no conflict of interest.

## REFERENCES

- [1] Abdelhafiz, A. S., Ali, A., Ziady, H. H., Maaly, A. M., Alorabi, M., & Sultan, E. A. (2020). Prevalence, associated factors, and consequences of burnout among Egyptian physicians during COVID-19 pandemic. *Frontiers in public health*, 8, 864. <https://doi.org/10.3389/fpubh.2020.590190>.
- [2] Abdullah, D. N. M. A., & Yuen, F. C. (2011). The impact of job burnout on job performance among nurses. 2011 IEEE Symposium on Business, Engineering, and Industrial Applications (ISBELA). <https://doi.org/10.1109/isbeia.2011.6088836>.
- [3] Abi Hussein, F. (2019). The Impact of Performance Obstacles on Workload and Quality of Working Life Among Critical Care Nurses in Lebanon. <http://repository.bau.edu.lb:8080/xmloi/handle/1080/9010>.
- [4] Abravani, P., & Gharibzadeh, S. (2020). Coping strategies during COVID-19 outbreak in Islamic Republic of Iran. *Journal of Experimental and Clinical Neurosciences*, 7(2). <https://doi.org/10.13183/jecns.v7i2.118>.
- [5] Al Sabei, S. D., Labrague, L. J., Miner, A., Karkada, S., Albashayreh, A., Al Masroori, F., & Al Hashmi, N. (2019). Nursing work environment, turnover intention, job burnout, and quality of care: The moderating role of job satisfaction. *Journal of Nursing Scholarship*, 52(1), 95-104. <https://doi.org/10.1111/jnu.12528>.
- [6] Ali, H., Astin Cole, A. A., & Sa'd Hamasha, G. P. (2020). Major stressors and coping strategies of frontline nursing staff during the outbreak of coronavirus disease 2020 (COVID-19) in Alabama. *Journal of Multidisciplinary Healthcare*, 13, 2057. <https://dx.doi.org/10.2147%2FJMDH.S285933>.

- [7] AlJhani, S., AlHarbi, H., AlJameli, S., Hameed, L., AlAql, K., & Alsulaimi, M. (2021). Burnout and coping among healthcare providers working in Saudi Arabia during the COVID-19 pandemic. *Middle East Current Psychiatry*, 28(1), 1-14. <https://doi.org/10.1186/s43045-021-00108-6>.
- [8] Al-Makhaita, H., M., Sabra, A. A., & Hafez, A. S. (2014). Job performance among nurses working in two different health care levels, Eastern Saudi Arabia: a comparative study. *International Journal of Medical Science and Public Health*, 3(7), 832-837. <https://doi.org/10.5455/ijmsph.2014.240420142>.
- [9] Apex-Apeh, C., O., Ujoatuonu, I. V., Ugwu, J. I., & Olowu, C. T. (2020). Motivation and work environment as predictors of job performance among nurses. *Nigerian Journal of Psychological Research*, 16(1).
- [10] Baloran, E. T. (2020). Knowledge, attitudes, anxiety, and coping strategies of students during COVID-19 pandemic. *Journal of loss and trauma*, 25(8), 635-642. <https://doi.org/10.1080/15325024.2020.1769300>.
- [11] Bender, A. E., Berg, K. A., Miller, E. K., Evans, K. E., & Holmes, M. R. (2021). "Making sure we are all okay": Healthcare workers' strategies for emotional connectedness during the COVID-19 pandemic. *Clinical Social Work Journal*, 1-11. <https://doi.org/10.1007/s10615-020-00781-w>.
- [12] Chen, J., Li, J., Cao, B., Wang, F., Luo, L., & Xu, J. (2020). Mediating effects of self - efficacy, coping, burnout, and social support between job stress and mental health among young Chinese nurses. *Journal of Advanced Nursing*, 76(1), 163-173. <https://doi.org/10.1111/jan.14208>.
- [13] Cho, H., & Han, K. (2018). Associations among nursing work environment and health-promoting behaviors of nurses and nursing performance quality: A multilevel modeling approach. *Journal of Nursing Scholarship*, 50(4), 403-410. <https://doi.org/10.1111/jnu.12390>.
- [14] Cui, S., Zhang, L., Yan, H., Shi, Q., Jiang, Y., Wang, Q., & Chu, J. (2020). Experiences and psychological adjustments of nurses who voluntarily supported COVID-19 patients in Hubei Province, China. *Psychology Research and Behavior Management*, 13, 1135. <https://doi.org/10.2147/PRBM.S283876>.
- [15] Del Castillo, F., & Alino, M. A. (2020). Religious coping of selected Filipino Catholic youth. *Religions*, 11(9), 462. <https://doi.org/10.3390/rel11090462>.
- [16] Dinibutun, S., R. (2020). Factors associated with burnout among physicians: an evaluation during a period of COVID-19 pandemic. *Journal of healthcare leadership*, 12, 85. <https://dx.doi.org/10.2147%2FJHL.S270440>.
- [17] Donaldson, L. J., Panesar, S. S., McAvoy, P. A., & Scarrott, D. M. (2014). Identification of poor performance in a national medical workforce over 11 years: an observational study. *BMJ quality & safety*, 23(2), 147-152. <http://dx.doi.org/10.1136/bmjqs-2013-002054>.
- [18] Duarte, I., Teixeira, A., Castro, L., Marina, S., Ribeiro, C., Jácome, C., ... & Serrão, C. (2020). Burnout among Portuguese healthcare workers during the COVID-19 pandemic. *BMC public health*, 20(1), 1-10. <https://doi.org/10.1186/s12889-020-09980-z>.
- [19] Dyrbye, L. N., Shanafelt, T. D., Johnson, P. O., Johnson, L. A., Satele, D., & West, C. P. (2019). A cross-sectional study exploring the relationship between burnout, absenteeism, and job performance among American nurses. *BMC nursing*, 18(1), 57. <https://doi.org/10.1186/s12912-019-0382-7>.
- [20] Eslami Akbar, R., Elahi, N., Mohammadi, E., & Fallahi Khoshknab, M. (2017). How do the nurses cope with job stress? A study with grounded theory approach. *Journal of Caring Sciences*, 6(3), 199-211. <https://doi.org/10.15171/jcs.2017.020>.
- [21] Fares, J., Al Tabosh, H., Saadeddin, Z., El Mouhayyar, C., & Aridi, H. (2016). Stress, burnout and coping strategies in preclinical medical students. *North American Journal of Medical Sciences*, 8(2), 75. <https://doi.org/10.4103/1947-2714.177299>.
- [22] Farhady, Y., Ashtari, Z., & Khodae, M. (2009). Relationship between job burnout and work performance in a sample of Iranian mental health staff. *African Journal of Psychiatry*, 12(1). <https://doi.org/10.4314/ajpsy.v12i1.30282>.
- [23] Fasbender, U., Van der Heijden, B. I., & Grimshaw, S. (2019). Job satisfaction, job stress and nurses' turnover intentions: The moderating roles of on-the-job and off-the-job embeddedness. *Journal of advanced nursing*, 75(2), 327-337. <https://doi.org/10.1111/jan.13842>.
- [24] Folkman S., Lazarus R., S. Coping as a mediator of emotion. *Journal of Personality and Social Psychology*. 1988; 54(3):466-475. <https://doi.org/10.1037/0022-3514.54.3.466>.
- [25] Freudenberg, H., J. (1974). undefined. *Journal of Social Issues*, 30(1), 159-165. <https://doi.org/10.1111/j.1540-4560.1974.tb00706.x>.
- [26] Fujino, Y., Tanaka, M., Yonemitsu, Y., & Kawamoto, R. (2015). The relationship between characteristics of nursing performance and years of experience in nurses with high emotional intelligence. *International journal of nursing practice*, 21(6), 876-881. <https://doi.org/10.1111/ijn.12311>.
- [27] Gozum, I. E. A. (2020). The filipino family in the formation of values in the light of John Paul II's familiaris consortio. *Φιλοσοφια: International Journal of Philosophy*, 21(Special Edition), 1-1.
- [28] Hall, L. H., Johnson, J., Watt, I., Tsipa, A., & O'Connor, D. B. (2016). Healthcare staff wellbeing, burnout, and patient safety: a systematic review. *PloS one*, 11(7), e0159015. <https://doi.org/10.1371/journal.pone.0159015>.
- [29] Hoff, T., Carabetta, S., & Collinson, G. E. (2019). Satisfaction, burnout, and turnover among nurse practitioners and physician assistants: a review of the empirical literature. *Medical Care Research and Review*, 76(1), 3-31. <https://doi.org/10.1177/1077558717730157>.
- [30] Hosseini, M., Sedghi Goyaghaj, N., Alamadarloo, A., Farzadmehr, M., & Mousavi, A. (2017). The relationship between job burnout and job performance of clinical nurses in Shiraz Shahid Rajaei hospital (thruma) in 2016. *Journal of clinical nursing and midwifery*, 6(2), 59-68. <http://jcnm.skums.ac.ir/article-1-596-en.html>.
- [31] Hu, D., Kong, Y., Li, W., Han, Q., Zhang, X., Zhu, L. X., Wan, S. W., Liu, Z., Shen, Q., Yang, J., He, H., & Zhu, J. (2020). Frontline nurses' burnout, anxiety, depression, and fear statuses and their associated factors during the COVID-19 outbreak in Wuhan, China: A large-scale cross-sectional study. *EClinicalMedicine*, 24, 100424. <https://doi.org/10.1016/j.eclinm.2020.100424>.

- [32] Iheduru-Anderson, K. (2021). Reflections on the lived experience of working with limited personal protective equipment during the COVID - 19 crisis. *Nursing inquiry*, 28(1), e12382. <https://doi.org/10.1111/nin.12382>.
- [33] Johansen, M. L., de Cordova, P. B., & Weaver, S. H. (2021). Exploration of the Meaning of Healthy Work Environment for Nurses. *Nurse Leader*, 19(4), 383-389. <https://doi.org/10.1016/j.mnl.2020.06.011>.
- [34] Kahambing, J. G., & Edilo, S. R. (2020). Stigma, exclusion, and mental health during COVID19: 2 cases from the Philippines. *Asian Journal of Psychiatry*, 54, 102292. <https://doi.org/10.1016/j.ajp.2020.102292>.
- [35] Kaynak, R., Tuygun Toklu, A., Elci, M., & Tamer Toklu, I. (2016). Effects of occupational health and safety practices on organizational commitment, work alienation, and job performance: Using the PLS-SEM approach. *International Journal of Business and Management*, 11(5), 146. <https://doi.org/10.5539/ijbm.v11n5p146>.
- [36] Khan, B. A. (2020). Economic Impact of Covid-19 And Change in Value System. *LC International Journal of STEM (ISSN: 2708-7123)*, 1(2), 23-31. <https://doi.org/10.5281/zenodo.5010230>.
- [37] Kim, H. S., & Yeom, H. (2018). The association between spiritual wellbeing and burnout in intensive care unit nurses: A descriptive study. *Intensive and Critical Care Nursing*, 46, 92-97. <https://doi.org/10.1016/j.iccn.2017.11.005>.
- [38] Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress*, 19(3), 192-207. <https://doi.org/10.1080/02678370500297720>.
- [39] Labrague, L. J., & De los Santos, J. A. A. (2020). COVID-19 anxiety among frontline nurses: Predictive role of organisational support, personal resilience and social support. *Journal of nursing management*, 28(7), 1653-1661. <https://doi.org/10.1111/jonm.13121>.
- [40] Lee, H. S., & Yom, Y. H. (2015). Role of self-leadership and social support in the relationship between job embeddedness and job performance among general hospital nurses. *Journal of Korean Academy of Nursing Administration*, 21(4), 375-385. <https://doi.org/10.1111/jkana.2015.21.4.375>.
- [41] Liyew, B., Dejen Tilahun, A., & Kasew, T. (2020). Knowledge, attitude, and associated factors towards physical assessment among nurses working in intensive care units: A multicenter cross-sectional study. *Critical Care Research and Practice*, 2020. <https://doi.org/10.1155/2020/9145105>.
- [42] Lu, J. L. (2017). Burnout as a form of mental health problem among nurses in the Philippines. *European Psychiatry*, 41(S1), S338-S339. <https://doi.org/10.1016/j.eurpsy.2017.02.295>.
- [43] Luan, X., Wang, P., Hou, W., Chen, L., & Lou, F. (2017). Job stress and burnout: A comparative study of senior and head nurses in China. *Nursing & health sciences*, 19(2), 163-169. <https://doi.org/10.1111/nhs.12328>.
- [44] Luceño-Moreno, L., Talavera-Velasco, B., García-Albuérne, Y., & Martín-García, J. (2020). Symptoms of posttraumatic stress, anxiety, depression, levels of resilience and burnout in Spanish health personnel during the COVID-19 pandemic. *International journal of environmental research and public health*, 17(15), 5514. <https://doi.org/10.3390/ijerph17155514>.
- [45] Mahmoudi, S., Barkhordari-Sharifabad, M., Pishgooe, A., Atashzadeh-Shoorideh, F., & Lotfi, Z. (2020). Burnout among Iranian nurses: A national survey. *BMC Nursing*, 19(1). <https://doi.org/10.1186/s12912-020-00461-7>.
- [46] Mariani, R., Renzi, A., Di Trani, M., Trabucchi, G., Danskin, K., & Tambelli, R. (2020). The impact of coping strategies and perceived family support on depressive and anxious symptomatology during the coronavirus pandemic (COVID-19) lockdown. *Frontiers in Psychiatry*, 11, 1195. <https://doi.org/10.3389/fpsy.2020.587724>.
- [47] Matsuo, T., Kobayashi, D., Taki, F., Sakamoto, F., Uehara, Y., Mori, N., & Fukui, T. (2020). Prevalence of health care worker burnout during the coronavirus disease 2019 (COVID-19) pandemic in Japan. *JAMA Network Open*, 3(8), e2017271. <https://doi.org/10.1001/jamanetworkopen.2020.17271>.
- [48] McDermid, F., Mannix, J., & Peters, K. (2020). Factors contributing to high turnover rates of emergency nurses: A review of the literature. *Australian critical care*, 33(4), 390-396. <https://doi.org/10.1016/j.aucc.2019.09.002>.
- [49] Muriithi, J. W. (2016). Work-related factors and coping strategies as determinants of burnout among nurses at Pumwani maternity hospital Nairobi (Doctoral dissertation, University of Nairobi). <http://hdl.handle.net/11295/99488>.
- [50] Neuman, B. (1996). The Neuman systems model in research and practice. *Nursing Science Quarterly*, 9(2), 67-70. <https://doi.org/10.1177/089431849600900207>.
- [51] Nimako, B. P. (2021). Resilience and Burnout among Registered Nurses in Ghana during Covid- 19 Pandemic. *International Journal of Nursing Science*, 11(1), 20-30. <https://doi.org/10.5923/j.nursing.20211101.03>.
- [52] Nuritasari, R. T., Rofiqi, E., Fibriola, T. N., & Ardiansyah, R. T. (2020). The effect of clinical supervision on nurse performance. *Jurnal Ners*, 14(3), 161. <http://dx.doi.org/10.20473/jn.v14i3.16956>.
- [53] Oliveira, R. M., Leitao, I. M., Aguiar, L. L., Oliveira, A. C., Gazos, D. M., Silva, L. M., Barros, A. A., & Sampaio, R. L. (2015). Evaluating the intervening factors in patient safety: Focusing on hospital nursing staff. *Revista da Escola de Enfermagem da USP*, 49(1), 104-113. <https://doi.org/10.1590/s0080-623420150000100014>.
- [54] Olsen, E., Bjaalid, G., & Mikkelsen, A. (2017). Work climate and the mediating role of workplace bullying related to job performance, job satisfaction, and work ability: A study among hospital nurses. *Journal of Advanced Nursing*, 73(11), 2709-2719. <https://doi.org/10.1111/jan.13337>.
- [55] Osei, S. A., Boahemaa, A. F., Pephrah, W. K., Marfo-Kusi, A. A., & Pinamang, B. N. (2019, December). Continuous Professional Development on Job Performance of Registered Nurses in Ghana. In *Abstract Proceedings International Scholars Conference* (Vol. 7, No. 1, pp. 116-128). <https://doi.org/10.35974/isc.v7i1.920>.
- [56] Polat, H., Turan, G. B., & Tan, M. (2020). Determination of the relationship of the spiritual orientation of nurses with compassion fatigue, burnout, and compassion satisfaction. *Perspectives in psychiatric care*, 56(4), 920-925. <https://doi.org/10.1111/ppc.12513>.
- [57] Pourteimour, S., Yaghmaei, S., & Babamohamadi, H. (2021). The relationship between mental workload and

- job performance among Iranian nurses providing care to COVID-19 patients: A cross-sectional study. *Journal of Nursing Management*. <https://doi.org/10.1111/jonm.13305>.
- [58] Putra, K. R. (2019). Prevalence of burnout syndrome among nurses in general hospitals in provincial East Java: Cross-sectional study. *Enfermeria clinica*, 29, 362-366. <https://doi.org/10.1016/j.enfcli.2019.04.045>.
- [59] Qu, H. Y., & Wang, C. M. (2015). Study on the relationships between nurses' job burnout and subjective wellbeing. *Chinese Nursing Research*, 2(2-3), 61-66. <https://doi.org/10.1016/j.cnre.2015.09.003>.
- [60] Riedl, E. M., & Thomas, J. (2019). The moderating role of work pressure on the relationships between emotional demands and tension, exhaustion, and work engagement: An experience sampling study among nurses. *European Journal of Work and Organizational Psychology*, 28(3), 414-429. <https://doi.org/10.1080/1359432X.2019.1588251>.
- [61] Rilveria, J. R. (2018). The development of the Filipino coping strategies scale. *Asia-Pacific Social Science Review*, 18(1), 111-126.
- [62] Ross, J. (2020). The exacerbation of burnout during COVID-19: A major concern for nurse safety. *Journal of Peri Anesthesia Nursing*, 35(4), 439-440. <https://doi.org/10.1016/j.jopan.2020.04.001>.
- [63] Sestili, C., Scalingi, S., Cianfanelli, S., Mannocci, A., Del Cimmuto, A., De Sio, S., ... & La Torre, G. (2018). Reliability and use of Copenhagen Burnout Inventory in Italian sample of university professors. *International Journal of Environmental Research and Public Health*, 15(8), 1708. <https://doi.org/10.3390/ijerph15081708>.
- [64] Sony, M., & Mekoth, N. (2016). The relationship between emotional intelligence, frontline employee adaptability, job satisfaction and job performance. *Journal of Retailing and Consumer Services*, 30, 20-32. <https://doi.org/10.1016/j.jretconser.2015.12.003>.
- [65] Suzuki, E., Yuko, T., Chiaki K., Chihiro, A., Hirotohi T., Takae, M., Hiroe, Y., Hiroko, K., & Masae, M. (2021). "A causal model on assertiveness, stress coping, and workplace environment: Factors affecting novice nurses' burnout." *Nursing Open*, 8(3), 1452-1462. <https://doi.org/10.1002/nop2.763>.
- [66] Tan, B. Y., Chew, N. W., Lee, G. K., Jing, M., Goh, Y., Yeo, L. L., & Sharma, V. K. (2020). Psychological impact of the COVID-19 pandemic on health care workers in Singapore. *Annals of internal medicine*, 173(4), 317-320. <https://doi.org/10.7326/M20-1083>.
- [67] Tee, M. L., Tee, C. A., Anlacan, J. P., Aligam, K. J. G., Reyes, P. W. C., Kuruchittham, V., & Ho, R. C. (2020). Psychological impact of COVID-19 pandemic in the Philippines. *Journal of affective disorders*, 277, 379-391. <https://doi.org/10.1016/j.jad.2020.08.043>.
- [68] van den Goor, M. M., Wagner, C. C., & Lombarts, K. M. (2020). Poor physician performance in the Netherlands: characteristics, causes, and prevalence. *Journal of patient safety*, 16(1), 7. <https://doi.org/10.1097/PTS.0000000000000222>.
- [69] Walton, A., & Rogers, B. (2017). Workplace hazards faced by nursing assistants in the United States: A focused literature review. *International Journal of Environmental Research and Public Health*, 14(5), 544. <https://doi.org/10.3390/ijerph14050544>.
- [70] Wang, J., Zhou, M., & Liu, F. (2020). Reasons for healthcare workers becoming infected with novel coronavirus disease 2019 (COVID-19) in China. *Journal of Hospital Infection*, 105(1), 100-101. <https://doi.org/10.1016/j.jhin.2020.03.002>.
- [71] Watmanlussy, R. F., Razak, A., Arifin, M. A., Syafar, M., & Daud, A. (2020). Overview of nurse performance quality of service in the inpatient room. Dr. D. Anatototi Larat hospital. *Medico Legal Update*, 20(4), 2190-2197.
- [72] Wilkason, C., Lee, C., Sauer, L. M., Nuzzo, J., & McClelland, A. (2020). Assessing and reducing risk to healthcare workers in outbreaks. *Health Security*, 18(3), 205-211. <https://doi.org/10.1089/hs.2019.0131>.
- [73] Woo, T., Ho, R., Tang, A., & Tam, W. (2020). Global prevalence of burnout symptoms among nurses: A systematic review and meta-analysis. *Journal of Psychiatric Research*, 123, 9-20. <https://doi.org/10.1016/j.jpsychires.2019.12.015>.
- [74] World Health Organization. (2020). Coronavirus disease (COVID-19): Situation report, 182.
- [75] Wu, Y., Wang, J., Luo, C., Hu, S., Lin, X., Anderson, A. E., Bruera, E., Yang, X., Wei, S., & Qian, Y. (2020). A comparison of burnout frequency among oncology physicians and nurses working on the frontline and usual wards during the COVID-19 epidemic in Wuhan, China. *Journal of Pain and Symptom Management*, 60(1), e60-e65. <https://doi.org/10.1016/j.jpainsymman.2020.04.008>.
- [76] Yektatalab, S., Honarmandnejad, K., & Janghorban, R. (2019). Relationship between occupational burnout and demographic variables among nurses in Jahrom, Iran. *The Pan African Medical Journal*, 34. <https://doi.org/10.11604/pamj.2019.34.22.15642>.
- [77] Yu, S., & Ko, Y. (2017). Communication competency as a mediator in the self-leadership to job performance relationship. *Collegian*, 24(5), 421-425. <https://doi.org/10.1016/j.colegn.2016.09.002>.
- [78] Zaghini, F., Fiorini, J., Piredda, M., Fida, R., & Sili, A. (2020). The relationship between nurse managers' leadership style and patients' perception of the quality of the care provided by nurses: Cross sectional survey. *International journal of nursing studies*, 101, 103446. <https://doi.org/10.1016/j.ijnurs.2019.103446>.
- [79] Zaid, W. M. A. B. (2019). The Impact of Job Burnout on the Performance of Staff Member at King Abdul-Aziz University. *International Journal of Business and Social Science*, 10(4), 10.30845/ijbss.v10n4p15.