

Exploring the Impact of Shift Duration on Nurses' Perceived Stress and Quality of Working Hours: A Comparative Study of 8-Hour Versus 12-Hour Shifts.

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ABSTRACT

The nursing workforce in the Philippines is known for its dedication and resilience but faces significant challenges, including the demands of shift work. Longer 12-hour shifts are common in local hospitals, offering continuity of care but raising concerns about fatigue, dissatisfaction, and burnout. This study examined the impact of shift durations on nurses' perceived stress and the quality of working hours during 8-hour versus 12-hour shifts. It involved a diverse group of nurses, varying in age, gender, educational background, and experience, working in private hospitals in the Province of Cavite.

A convergence mixed-method design combined quantitative and qualitative approaches to provide a comprehensive analysis. Quantitative data analysis identified patterns, correlations, and differences in stress and working hours based on shift length, while qualitative thematic analysis explored nurses' experiences. Established scales like the Perceived Stress Scale (PSS) ensured construct validity, while criterion validity compared the study's instruments with established measures of stress and job satisfaction. Reliability was tested through Cronbach's alpha and test-retest methods.

Results showed that most respondents were aged 22-26 (28.75%) and 32-36 (25%), with males (81.25%) outnumbering females (18.75%). Nearly half (47.5%) had over five years of experience, and more than 80% were satisfied with their work schedules. However, nurses working 12-hour shifts faced higher risks of burnout, dissatisfaction, and intent to leave. Dissatisfaction was 40% higher for 12-hour shifts compared to 8-hour shifts. Nurses also reported fatigue, mood changes, and health issues after long shifts, which reduced social opportunities and affected mental well-being. Staff nurses (65%) dominated the population, with ICU (11.25%) and wards (10%) as the most common assignments. Night shifts caused sleep debt, reduced sleep quality, and increased medical errors, linking rotating shifts to anxiety and depression. Nurses on 8-hour shifts reported better job satisfaction and health than those on 12-hour shifts. The study found no significant link between perceived stress and working hours (p -value = 0.605), but stress negatively affected nurses' quality of life. Long or irregular shifts led to reduced patient safety, unfinished tasks, fatigue, disrupted sleep, and health problems like musculoskeletal disorders. These factors contributed to job dissatisfaction, burnout, absenteeism, and staffing challenges. Qualitative findings revealed that while nurses preferred 12-hour shifts for more family time, they found them stressful and exhausting. Long hours in 24/7 facilities disrupted sleep schedules, leading to poor sleep quality and duration. Economic pressures and tight schedules further reduced sleep, and a lack of awareness about sleep's importance caused nurses to prioritize other activities over rest. Fatigue impacted job performance, affected communities, and increased errors in patient care.

The study highlighted the essential role of nurses as the primary caregivers in healthcare. Managing medication and monitoring recovery requires constant attention, making continuous work without rest impractical. It stressed the importance of shifts to help nurses manage stress, prevent burnout, and perform effectively. To improve work-life balance, the study recommended giving nurses more time for rest, social activities, and exercise. Promoting breaks, mentoring less-experienced nurses, and involving managers and clinicians in providing support were suggested. Hospitals were advised to ensure safe shift practices for both staff and patients. Leadership efforts should include reviewing safety practices, addressing staff concerns, and offering ongoing education to enhance skills and patient care. To reduce fatigue, the study proposed revising

staffing models, minimizing overtime, optimizing workflows, and using technology for better planning. Finally, it emphasized prioritizing patient safety over maximizing productivity, even if it incurs higher costs.

This study concluded that improving nurses' work conditions is crucial for their well-being and the overall quality of healthcare. By addressing stress, burnout, and safety concerns, hospitals can ensure a healthier, more effective nursing workforce while maintaining high standards of patient care.

Keywords: 8-hour shift; 12-hour shift; perceived stress; working hours

INTRODUCTION

In the ever-changing global healthcare landscape, nursing stood as a crucial component, facing the challenges of providing continuous care (International Council of Nurses [ICN], 2020). Worldwide, nurses formed the largest group of healthcare professionals, playing a vital role in patient outcomes and the overall efficiency of healthcare systems (World Health Organization [WHO], 2021). Central to their responsibilities was shift work, designed to ensure 24-hour patient care. Shift patterns, predominantly 8-hour and 12-hour durations, varied globally and were frequently debated regarding their effects on nurse well-being and patient care quality (Caruso, 2014). Shift work in nursing had been extensively studied due to its potential impact on physical and psychological health. Extended working hours, particularly 12-hour shifts, were linked to increased fatigue, stress, and burnout among nurses (Stimpfel & Aiken, 2013). These issues affected not only nurses' health and well-being but also patient safety and care quality. Conversely, traditional 8-hour shifts, while potentially reducing fatigue, raised concerns about more frequent handovers and continuity of care (Griffiths et al., 2014).

In the Philippines, the healthcare system faced unique demands and challenges, with nurses at the forefront of patient care. The configuration of nurse shift patterns, mainly 8-hour and 12-hour shifts, significantly influenced both the well-being of nursing staff and the quality of care provided (Labrague et al., 2018). Nurses in local hospitals managed a complex array of duties, often under pressure due to heavy patient loads, limited resources, and institutional expectations. While the nursing workforce in the Philippines was characterized by dedication and resilience, it was not immune to the global challenges of nursing. The longer 12-hour shifts, commonly practiced in local hospitals, offered continuity of care with fewer handovers but raised concerns about increased fatigue, job dissatisfaction, and burnout (Bae & Fabry, 2014). In contrast, 8-hour shifts, although less physically taxing, often resulted in more frequent transitions in patient care and challenges in maintaining work-life balance (Harris et al., 2015).

Despite extensive research, a significant gap remained in understanding how nurses perceived these shift patterns and their effects on stress levels and the quality of working hours. Much of the existing literature was quantitative, failing to capture the subjective experiences and personal narratives of nurses working under these different shift systems (Chen et al., 2019). There was a critical need for qualitative insights to complement quantitative data, offering a more nuanced and comprehensive understanding of how shift lengths impacted nurses' professional and personal lives.

Background of the Study

Shift work in high-pressure hospital environments significantly affects nurses' physical, emotional, and mental well-being. In operating rooms, nurses often work over 12-hour shifts due to the unpredictable nature of surgical procedures and emergencies. These long hours leave nurses exhausted and mentally drained, impacting their ability to provide quality care. This study examines the impact of shift duration on nurses' stress levels and work quality, comparing 8-hour and 12-hour shifts. Standardized shift schedules often overlook individual circumstances, such as family responsibilities or personal challenges. Nurses with additional obligations may struggle more with the demands of 12-hour shifts, yet their experiences and feedback are rarely considered in policymaking, leaving gaps in support systems. Research has primarily focused on quantitative data about job satisfaction and stress, neglecting personal experiences. Some nurses thrive on the structured routine of 8-hour shifts but face challenges with frequent handovers. Others prefer the continuity of 12-hour shifts but experience burnout. These personal insights are rarely captured in data, resulting in an incomplete understanding of shift work's effects.

Unit-specific contexts further influence the impact of shift lengths. For example, operating room nurses experience stress from handling urgent cases, while general ward nurses face challenges like heavy patient loads and administrative duties. These differences highlight the limitations of a one-size-fits-all approach to shift scheduling and the need for more tailored strategies. Staffing shortages and institutional policies also worsen nurse stress. Hospitals often rely on overtime and extended shifts to address shortages, leading to burnout and job dissatisfaction. Many nurses hesitate to voice concerns about stress due to fears of being judged, reinforcing a culture that overlooks their well-being.

Despite existing studies, gaps remain in understanding how shift patterns affect nurses' stress and work quality. The lack of qualitative data and mixed-method research fails to fully capture the personal and contextual factors that shape nurses' experiences. Additionally, hospital environments differ in patient loads, unit demands, and support systems, further underscoring the need for context-specific research. By addressing these gaps, this study aims to provide insights to improve staffing policies, create better shift schedules, and develop interventions that enhance nurse well-being and improve patient care.

Conceptual Framework

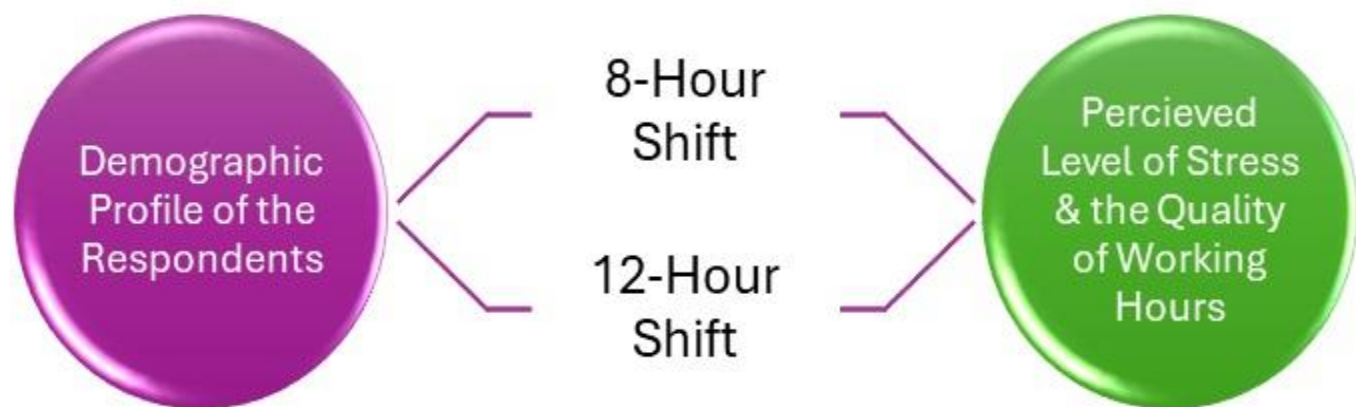


Figure 1. Self-Developed Conceptual Framework

The conceptual paradigm of the study was represented by two circles. The first circle encompassed demographic information about the respondents. Key demographic variables included age, which influenced the perception and management of stress due to different life stages and experiences. Gender was another significant factor, as stress responses and work-life balance issues often varied between male and female nurses. Educational level, ranging from diploma to advanced degrees, was also considered, as it could affect nurses' coping mechanisms and attitudes toward stress and workload.

Years of nursing experience played an important role, as experienced nurses likely had different coping strategies compared to those who were newer to the field. Marital status and the number of dependents were also critical factors; nurses with family responsibilities often faced additional stressors that impacted their work-life balance. Job position or role within the nursing hierarchy, from staff nurses to managerial roles, influenced stress levels and responsibilities.

Additionally, the type of unit or department where nurses worked was significant. Those in high-intensity areas like emergency or intensive care units often experienced higher stress levels compared to nurses in general wards or outpatient services. Work schedules, including shift lengths, night shifts, and rotating shifts, were pivotal in understanding stress and the quality of working hours. Physical and mental health status was also included to evaluate how overall health influenced job stress and coping mechanisms. Together, these demographic variables provided a comprehensive perspective to analyze the diverse experiences and perceptions within the nursing workforce, enriching the study's findings and enabling more targeted recommendations.

The second circle represented the study's dependent variables: Perceived Stress Levels and Quality of Working Hours among nurses. These variables were expected to be influenced by the length of their work shifts, classified as either 8-hour or 12-hour shifts. The first dependent variable, Perceived Stress Levels, captured the subjective experience of stress encountered by nurses in their work environment. Stress in nursing manifested in various forms, including emotional tension, mental fatigue, and physical exhaustion. This variable highlighted the individualized nature of stress, as some nurses felt more overwhelmed or pressured depending on their work conditions, coping mechanisms, and resilience. The second dependent variable, Quality of Working Hours, encompassed factors that influenced how nurses perceived their work schedules and the resultant impact on their professional and personal lives. This variable included overall job satisfaction, work-life balance, physical and mental fatigue, and a general sense of well-being related to their work hours. It extended beyond the immediate workplace to affect areas like job performance, satisfaction, and retention in the nursing profession. By focusing on these dependent variables, the study aimed to reveal the multifaceted effects of shift lengths on nurses' overall work experiences. The findings provided critical insights to inform staffing policies, shift designs, and support systems within the healthcare sector, ultimately helping to optimize the well-being and effectiveness of nursing professionals.

Statement of the Problem

The study was conducted to explore the impact of shift duration on nurses' perceived stress and quality of working hours between 8-hour and 12-hour shifts. Specifically, the study aimed to answer the following questions:

1. What is the demographic profile of the respondents in terms of:
 - a. Age
 - b. Gender
 - c. Educational Level
 - d. Years of Experience
 - e. Area of Assignment
 - f. Current position
 - g. Physical Health Status
 - h. Mental Health Status
2. What is the perceived level of stress among nurses with 8-hour shift compared to 12-hour shift?
3. How does the quality of working hours differ from nurses working on 8-hour shift and nurses working on 12-hour shift?
4. Is there any significant relationship between the perceived stress and the quality of working hours of nurses when grouped according to the demographic profile?
5. Is there any significant difference in the perceived stress levels among nurses working 8-hour shifts compared to those working to 12-hour shift?
6. What are the subjective experiences and perceptions of nurses regarding the impact of shift length on their stress levels and quality of working hours?
7. Based on the results of the study, what output can be made?

Hypothesis

HO1: There is no significant relationship between the perceived stress and the quality of working hours of nurses when grouped according to the demographic profile.

HO2: There is no significant difference in the perceived stress levels among nurses working 8-hour shifts compared to those working to 12-hour shift.

Scope and Limitations of the Study

The study specifically compared 8-hour and 12-hour shifts, focusing on their impact on nurses' perceived stress and quality of working hours. It included a diverse group of nurses varying in age, gender, educational background, and years of experience, providing a comprehensive understanding of how these factors influenced the outcomes. The study was conducted in selected private hospitals in the Province of Cavite, offering insights specific to inpatient care environments.

However, several limitations were observed. The study's locale was a significant limitation, as the findings from private hospitals in the Province of Cavite may not be generalizable to all nursing environments or healthcare systems. Additionally, perceived stress and quality of working hours were subjective experiences. While efforts were made to quantify these, they remained inherently subjective and varied widely among individuals.

Significance of the Study

The significance of this study on the impact of shift duration on nurses' perceived stress and quality of working hours extends across various stakeholders in the healthcare sector, including nursing personnel, nursing administrators, hospital administrators, nursing educators, and future researchers.

Nursing Personnel. Understanding how shift lengths affect stress and job satisfaction can help nurses make informed choices about their work schedules. Furthermore, the study provides evidence-based data that nurses can use to advocate for better working conditions and shift structures.

Nursing Administrators. Insights from the study can guide nursing administrators in optimizing shift schedules to improve job satisfaction and reduce burnout among nursing staff. The findings can inform the development of policies and practices that support nurse well-being and professional development.

Hospital Administrators. Understanding the impact of shift lengths on nurses can help hospital administrators make decisions that enhance the efficiency and effectiveness of healthcare delivery. By addressing factors that contribute to nurse stress and dissatisfaction, hospitals can improve staff retention and reduce turnover rates.

Nursing Educators. Educators can integrate findings into nursing curriculums, preparing future nurses to manage work-related stress effectively. The study adds to the body of knowledge that educators can use for research and teaching purposes.

Future Researchers. This study can serve as a basis for further research in areas such as shift work, stress management, and nurse well-being. The findings might highlight new aspects of shift work and nurse health that warrant deeper investigation.

Definition of Terms

For clarity and understanding of the study, the following terms have been defined operationally:

NURSES' PERCEIVED STRESS refers to the level of stress that nurses personally experience and report in relation to their work environment and duties. It encompasses their subjective evaluation of the stressors they encounter in their professional roles and how these stressors affect their psychological and emotional well-being.

QUALITY OF WORKING HOURS refers to the perceived value and satisfaction nurses derive from their work hours, considering various aspects of their job and how these hours impact their professional and personal lives.

SHIFT DURATION refers to the length of time a nurse is scheduled to work during a single shift. Specifically, the study focuses on comparing two commonly used shift lengths in the nursing profession. 8-hour Shifts are traditional work shifts, lasting approximately 8 hours each. Nurses working these shifts

typically do so in a pattern that might include morning, afternoon, or night shifts. In a standard full-time work schedule, this could translate to five 8-hour shifts spread over a week. 12-hour Shifts are longer, covering a 12-hour period. Nurses working 12-hour shifts often do so in a pattern that might involve working three days a week. This shift model is frequently used in hospitals and healthcare settings to provide continuous patient care while reducing the number of handovers between staff.

METHODOLOGY

This chapter presents the methodology used in the study, including the research design, setting, respondents, research instrument, data gathering procedure, validation, and statistical analysis.

Research Design

This study utilized a convergence mixed-method design, integrating both quantitative and qualitative approaches to provide a comprehensive understanding of the research problem. Quantitative research, as described by Creswell (2014), is a systematic investigation focusing on quantifying phenomena. It involves collecting and analyzing numerical data to identify patterns, relationships, or trends. Structured tools such as surveys and questionnaires were employed to assess levels of perceived stress and the quality of working hours among nurses working 8-hour and 12-hour shifts. This approach provided objective results that could be generalized across populations. In addition, qualitative research, as defined by Creswell (2018), was used to explore the depth, meaning, and complexity of nurses' experiences, perceptions, and attitudes toward their shift lengths. Methods such as interviews and focus groups allowed for the collection of non-numerical data to gain insights into human behavior and social contexts. This interpretive approach aimed to construct a holistic understanding of how shift durations influenced stress and work quality.

According to Creswell and Clark (2017), the Convergence Mixed-Method design integrates qualitative and quantitative data to address research questions. Data from both strands were collected and analyzed concurrently but independently, and the findings were merged during interpretation to provide a nuanced understanding. This design emphasized cross-validation or triangulation, where findings from one method corroborated or elaborated on the other, enhancing the study's validity. By combining statistical measurements with personal perspectives, this approach allowed for a more holistic view of the complex phenomena studied.

Population and Sampling Technique

The study focused on registered nurses employed in selected private hospitals in the Province of Cavite, where shift work was a common practice. The population included nurses from various departments, such as emergency, pediatrics, intensive care units, and general wards, working on different shift patterns, including 8-hour and 12-hour shifts. The sample was designed to represent a diverse range of experiences, backgrounds, and work environments, ensuring that the findings were comprehensive and applicable to a broad nursing context.

By integrating both quantitative and qualitative data, this study aimed to provide valuable insights into the impact of shift durations on nurses' perceived stress and the quality of their working hours. The convergence of data allowed for a deeper exploration of the topic, addressing gaps in existing research and contributing to the development of more effective staffing policies and shift scheduling practices.

Sampling Technique

Given the mixed-methods approach of the study, a combination of sampling techniques was employed to adequately address both quantitative and qualitative components. For the quantitative component, a stratified random sampling technique was utilized. The population was divided into strata based on criteria such as hospital department and type of shift, and respondents were randomly selected from each stratum. This method ensured a representative sample, allowing generalizations about the impact of shift length on perceived stress and the quality of working hours across various nursing contexts.

For the qualitative component, purposive sampling was used to select participants who could provide in-depth insights into their experiences and perceptions of shift work. Participants were intentionally chosen based on specific criteria relevant to the research question, such as nurses who had experience with both 8-hour and 12-hour shifts or those who had expressed concerns about shift work. This approach was well-suited to qualitative research, focusing on gaining a deeper understanding of participants' perspectives.

The study also considered sample size requirements. For the quantitative component, a larger sample size was chosen to ensure robust statistical analysis and generalizability. The exact number was determined through power analysis and expected effect size. For the qualitative component, the sample size was smaller, prioritizing the depth of information obtained from participants. Data saturation, the point at which no new information emerged from additional interviews, guided the final sample size for qualitative data collection.

Research Instrument

The research instrument for this study on the impact of shift duration on nurses' perceived stress and quality of working hours was a meticulously designed mixed-methods tool that included both a structured questionnaire and a semi-structured interview guide. The questionnaire, used for the quantitative component, was divided into two major parts. The first part collected demographic information, assessed perceived stress levels using the Likert-scale-based Perceived Stress Scale (PSS), and evaluated the quality of working hours through statements rated by participants on their level of agreement. The second part, the qualitative component, used a semi-structured interview guide to gather in-depth insights into nurses' personal experiences, perceptions, and attitudes toward their work schedules, stress, and job satisfaction.

These instruments were designed to quantify levels of stress and satisfaction while exploring the personal experiences behind the data, providing a comprehensive understanding of the study's core issues. This dual approach facilitated a multi-dimensional analysis of how shift durations influenced nurses' well-being and job satisfaction by combining the breadth of quantitative data with the depth of qualitative narratives.

Validity and Reliability of the Study

Ensuring the validity and reliability of this study was essential to producing accurate, reproducible findings that could be generalized to the broader nursing population. Validity referred to the accuracy of the measurements and whether the instruments measured what they were intended to measure. Content validity ensured that the survey and interview questions comprehensively covered aspects of shift duration, perceived stress, and the quality of working hours. This was achieved through a thorough literature review and consultation with experts in nursing and occupational health to develop and review the research instruments.

Construct validity was supported by using established scales like the Perceived Stress Scale (PSS). For newly developed questions, factor analysis was conducted to test underlying theoretical constructs. Criterion validity was evaluated by comparing the study's instruments with established measures of stress and job satisfaction, where available, to confirm their accuracy.

Reliability referred to the consistency of measurements over time and across conditions. Internal consistency of the quantitative survey was assessed using Cronbach's alpha, with a value of 0.7 or higher considered acceptable for social sciences research. Test-retest reliability was determined by administering the survey instrument to a subset of the target population at two different points in time, evaluating the stability of responses. For the qualitative component, interrater reliability was assessed by having multiple researchers independently code a subset of interviews and then compare their results. Cohen's kappa was used to measure agreement between raters. Feedback from participants during pilot testing was used to refine ambiguous or poorly performing items, further enhancing validity and reliability. In a mixed-methods study, addressing validity and reliability involved both the quantitative and qualitative components. Triangulation, or using multiple data sources or methods to examine the same phenomenon, enhanced the overall validity of the study. Systematic and transparent processes in qualitative data collection and analysis contributed to the reliability of qualitative findings.

By rigorously testing and validating the research instruments and maintaining consistency in data collection

and analysis, the study achieved a high level of validity and reliability. This ensured that its findings were credible and valuable for informing nursing practice and policy.

Data Gathering Procedure

The data collection process for this study on the impact of shift duration on nurses' perceived stress and quality of working hours employed a mixed-methods approach to provide a comprehensive understanding of the research problem. The process was divided into three phases: quantitative data collection, qualitative data collection, and data integration and analysis. During the quantitative phase, nurses were recruited from various hospital departments to ensure a diverse sample representing both 8-hour and 12-hour shift patterns. Participants were informed about the study's purpose, confidentiality measures, and their rights, with informed consent obtained before participation. Structured surveys were then distributed either electronically or in paper format to accommodate participant preferences. The survey included demographic questions, the Perceived Stress Scale (PSS), and items assessing the quality of working hours. Participants completed the survey at their convenience, with reminders sent to improve response rates. This phase collected data on stress levels, satisfaction with working hours, and the impact of shift lengths on nurses' well-being.

The second phase involved qualitative data collection, where a purposive sample of nurses was selected from the survey respondents for in-depth interviews. This selection aimed to include diverse experiences and perspectives on shift work. Semi-structured interviews were conducted in a format that suited participant preferences, such as face-to-face, telephone, or video conferencing. An interview guide facilitated the exploration of nurses' experiences and perceptions regarding shift duration, stress, and work-life balance. Interviews were audio-recorded with consent to ensure accuracy, and transcripts were created with anonymized data to maintain confidentiality.

The final phase integrated the findings from both quantitative and qualitative analyses. Statistical analysis of survey data identified patterns, correlations, and differences in perceived stress and quality of working hours based on shift lengths. Thematic analysis of interview transcripts provided deeper insights into nurses' personal experiences with shift work. These findings were merged during the interpretation phase to create a holistic view of how shift durations influenced stress levels and work quality. This mixed-methods approach combined the breadth of statistical data with the depth of personal narratives, offering a nuanced understanding of the research problem.

Throughout the process, ethical considerations were prioritized. Participants' confidentiality was maintained, informed consent was obtained, and the right to withdraw was emphasized. This comprehensive approach ensured that the study captured both measurable impacts and the subjective experiences of nurses, providing valuable insights for improving shift scheduling policies and enhancing nurse well-being.

Ethical Considerations

Ethical considerations were a key focus of the study, ensuring respect, confidentiality, and minimizing harm to participants. Several measures were implemented to maintain ethical integrity:

Informed Consent: Nurses were informed that participation was voluntary, and they could withdraw at any time without penalty. Detailed information about the study's purpose, procedures, risks, and benefits was provided to ensure participants made informed decisions. Consent forms were written in simple language to ensure clarity.

Confidentiality and Privacy: Personal information and responses were securely stored and accessible only to the research team. Identifiable information was either excluded or separated from the data early in the process. Findings were anonymized and presented in aggregate form to prevent identification, especially in small nursing communities.

Minimizing Harm: Given the study's focus on stress, researchers ensured that participation did not cause undue distress. Resources or referrals were available for participants who found discussions about work stress challenging. The study design ensured that potential benefits, such as improved work conditions, outweighed

any risks.

Ethical Approval: The study protocol, including recruitment, consent forms, and data collection methods, was reviewed and approved by an Institutional Review Board (IRB) to ensure compliance with ethical standards and the protection of participants' rights.

Transparency and Accountability: The researchers committed to honest reporting of findings, including negative or inconclusive results. Participants were offered a summary of the findings to acknowledge their contribution and keep them informed.

By following these ethical guidelines, the study upheld participants' rights and dignity, ensuring the research contributed valuable insights without compromising ethical standards.

RESULTS AND DISCUSSION

This chapter presented the result of quantitative and qualitative data in two sections and a discussion of the result. The first section presented the data analysis of quantitative data whereas the second part presented the data analysis of qualitative data.

Table 1: Age of the Respondents

Age	Frequency	Frequency Percentage
22-26	23	28.75%
27-31	3	3.75%
32-36	20	25.00%
37-41	18	22.5%
42-46	5	6.25%
47-51	5	6.25%
52-56	3	3.75%
62-66	3	3.75%
TOTAL	80	100.00

Since the majority of respondents (28.75%) are between the ages of 22 and 26 and 25% are between the ages of 32 and 36, Table 1 indicates that these individuals spend the most time with patients and are constantly available during their shifts. The length of nurses' working hours is crucial to both the quality of treatment and the effective fight against infection. During the pandemic, nurses were additionally overworked as a result of having to put in more hours because of a nursing shortage.

Table 2: Gender of the Respondents

Gender	Frequency	Frequency Percentage
Male	65	81.25%
Female	15	18.75%
TOTAL	80	100.00

Table 2 showed that the majority of respondents were male, accounting for 81.25%, while females made up 18.75%. This highlighted that nursing requires adaptability and attention to detail. Some argued that nurses

working 12-hour shifts struggled to perform at their best due to the toll on their physical and mental health (Thompson, 2019). Conversely, others supported 12-hour shifts, suggesting no significant differences in work performance, job satisfaction, or patient outcomes compared to 8-hour shifts (Ballie et al., 2019). Considering these contrasting perspectives and contributing to existing data could help improve nursing practices in the future.

Table 3: Years of Experience

Years of Experience	Frequency	Frequency Percentage
Less than a year	11	13.75%
1-5 years	31	38.75%
5 years and more	38	47.50%
TOTAL	80	100.00

Table 3 showed that 47.50% of the respondents had more than five years of nursing experience. This suggested that over 80% of nurses were satisfied with their institution's scheduling practices, as reported in prior studies (Smith et al., 2019). However, it was also found that longer shift lengths increased rates of burnout, job dissatisfaction, and the intention to leave their positions in the near future. Nurses working more than 12 hours per shift faced the highest risk of poor outcomes compared to those working shorter shifts (Jones et al., 2020). Job satisfaction was measured on a scale of 1 to 4, with 4 indicating the highest level of satisfaction and 1 representing the lowest. The intention to leave was assessed based on whether nurses agreed or disagreed with the likelihood of staying in their organization for another year. The study also explored nurses' discomforts, including experiences of fatigue, sleepiness, moodiness, back pain, and digestive problems after their shifts. Additionally, nurses were asked about their views on reducing shift hours, participating in overtime, and the impact of these factors on their ability to socialize. These findings highlighted the complex interplay between shift length, job satisfaction, physical discomfort, and the social and professional lives of nurses. Addressing these issues is crucial to improving nurse well-being and retention (Brown et al., 2021).

Table 4: Area of Assignment

Area of Assignment	Frequency	Frequency Percentage
Central Endoscopy Unit	1	1.25%
clinical instructor	1	1.25%
Day Surgery	1	1.25%
DR,O.R,ICU,PICU	1	1.25%
Emergency	1	1.25%
Emergency Department	2	2.50%
Emergency Room	2	2.50%
Endoscopy	1	1.25%
ER	3	3.75%
ER and Ward	1	1.25%
Er department	1	1.25%
Fifth floor Ward	1	1.25%

General	1	1.25%
General Medicine Services	1	1.25%
General Ward	3	3.75%
General Ward / OR-DR / OB Ward	1	1.25%
HD	1	1.25%
Hospice	1	1.25%
ICU	9	11.25%
ICU	1	1.25%
ICU, Hemodialysis Center	1	1.25%
Intensive care unit	2	2.50%
ISO	1	1.25%
Isolation Ward	1	1.25%
IVU	1	1.25%
Labor and delivery	1	1.25%
MEDICAL	1	1.25%
Medical Ward	1	1.25%
MS	1	1.25%
MS Ward	1	1.25%
NICU	4	5.00%
NSO	3	3.75%
Nurse Manager	1	1.25%
Nursing Office	1	1.25%
Nursing Service	1	1.25%
OB and Pedia	1	1.25%
OB ward	2	2.50%
OB/Pedia	1	1.25%
Operating Room	4	5.00%
Operating Room Complex	1	1.25%
OR	2	2.50%
OR/DR	1	1.25%
OR/DR, ER	1	1.25%
OR/DR/RR	1	1.25%
Pain	1	1.25%

Pediatric	1	1.25%
Ward	8	10.00%
Ward department	1	1.25%
TOTAL	80	100.00

Table 4 showed that the majority of nurses were assigned to the ICU (11.25%) and the ward (10%). The data indicated that increased shift lengths had significant adverse effects on the outcomes examined in this study. Burnout rates were notably higher among nurses working 12-hour shifts. Those on 12-hour shifts were twenty-six times more likely to score high for emotional exhaustion on the Maslach Burnout Inventory (MBI) compared to nurses working 8-hour shifts (Stimpfel et al., 2013). Additionally, these nurses were more likely to experience low personal accomplishment and high depersonalization in their roles. Dissatisfaction increased significantly, with a marked 40% rise among those working 12-hour shifts compared to those working 8-hour shifts (Bae & Fabry, 2014).

Table 5: Current Position

Current Position	Frequency	Frequency Percentage
Administrator	2	2.50%
Nurse Manager	10	12.50%
Other	15	18.75%
Staff Nurse	52	65.00%
Staff Nurse, Administrator	1	1.25%
TOTAL	80	100.00

Table 5 showed that 65% of respondents held the position of staff nurse, indicating that a significant portion of nurses were exposed to health complications associated with long shift hours. Research has demonstrated that shift work, particularly night shifts, caused sleep debt, with nurses losing up to two hours of sleep per day (Booker et al., 2023). This reduction in sleep quantity and quality adversely affected their health, increasing the likelihood of drowsiness during work hours, which compromised patient care and elevated the risk of medical errors. Moreover, shift work was linked to negative psychosocial outcomes, including heightened levels of anxiety and depression, which further impacted nurses' mental health and job performance (Smith & Taylor, 2023).

Table 6: Stress Level among Nurses

Category	Mean	SD	Interpretation
12-hour shift	3.19	0.31	Moderate Stress
8-hour shift	3.25	0.49	Moderate Stress
OVERALL	3.22	0.44	Moderate Stress

Legend

- Scale Description
- 5.00-4.50 Very Severe Stress
 - 4.49-3.50 Severe Stress

- 3.49-2.50 Moderate Stress
- 2.49-1.50 Mild Stress
- 1.49-1.00 Normal

Table 6 showed that respondents working 8-hour shifts experienced moderate stress levels at 3.25%, while those on 12-hour shifts reported 3.19%. Shift work was essential for ensuring continuous patient care in hospitals and residential facilities. However, night shifts significantly disrupted circadian rhythms, leading to alterations in sleep and biological functions that adversely affected physical and psychological well-being, ultimately impairing work performance (BMC Nursing, 2023). The counterclockwise rotation of shifts (afternoon/morning/night) implemented in some hospitals did not promote adequate rest and sleep between shifts due to its rapid and backward sequence. Research indicated that clockwise rotations (morning/afternoon/night) were more beneficial, as nurses required at least four days to adjust their circadian rhythms after a night shift (MDPI, 2023). Additionally, nurses reported poorer sleep quality and quantity when working morning shifts compared to day shifts, suggesting that morning shifts should not start too early to allow sufficient sleep and energy restoration. Night shift work frequently induced sleep disorders, which were often underestimated but posed significant risks to mental and physical health and increased the likelihood of accidents (Oxford Academic, 2023).

Table 7: Quality of Working Hours of Among Nurses

Category	Mean	SD	Interpretation
12-hour shift	3.19	0.60	Good
8-hour shift	3.34	0.62	Good
OVERALL	3.27	0.61	Good

Legend

Scale Description

- 5.00-4.50 Excellent
- 4.49-3.50 Very Good
- 3.49-2.50 Good
- 2.49-1.50 Fair
- 1.49-1.00 Poor

The table showed that quality working hours were slightly higher among nurses working 8-hour shifts (3.34%) compared to 12-hour shifts (3.19%). Studies conducted in Italian hospitals highlighted that registered nurse (RN) work schedules could be a significant stress factor, impacting health and well-being, particularly in areas such as job satisfaction, sleep quality, psychological conditions, and cardiovascular health. Chronic fatigue was frequently observed among nurses working under demanding schedules. These findings emphasized the need for workers on rotating night schedules to receive special attention and regular health checks due to the elevated risk of job dissatisfaction and undesirable health outcomes (Boccabella & Golden, 2023).

Nursing care, requiring a high level of responsibility and careful attention, demanded optimized working conditions to ensure the provision of high-quality care over extended periods such as 12-hour shifts. In line with the World Health Organization's definition of shift work as a risk factor for numerous health disorders, research suggested that applying ergonomic criteria to reduce the adverse effects of shift schedules could lead to better organization in healthcare. A shift pattern that respects the health and well-being of workers could improve the quality of life for both nurses and patients (Smith et al., 2023).

Furthermore, this study aligned with others that found a significant positive association between quick returns (<12 hours off between shifts) and issues such as insomnia, fatigue, and other shift work-related disorders.

Evidence suggested that regulations ensuring at least 12 hours off between shifts, as implemented in many European countries, could improve the well-being of shift workers. Additionally, preparing shift schedules well in advance was identified as protective for nurses' private lives, reducing psychological stress and promoting social adjustment (Jones & Taylor, 2023).

Table 8: Relationship between Perceived Stress and Quality of Working Hours

Variables	Pearson's r	p-value	Correlation	Interpretation
Stress Level	.058***	.605	Negligible Correlation	Not Significant
Working Hours				

*Correlation is not significant at .05 level of significance

Table 8 showed the relationship between perceived stress and quality of working hours, which had a p-value of 0.605, indicating no significant association between stress levels and the quality of working hours. Despite this, the study highlighted the negative effects of nurses' perceived stress on their quality of life, emphasizing the need to address nurses' concerns seriously. Appropriate interventions to reduce perceived stress and improve nurses' quality of life were deemed necessary, particularly for those caring for patients.

The healthcare system, structured to provide services 24 hours a day, seven days a week, relied heavily on nurses as they represented the largest professional group. The overall quality of the healthcare system depended significantly on nurses' performance. However, the ability of nurses to deliver high-quality care was closely linked to their own health and well-being. Ensuring the well-being of nursing staff was therefore essential for maintaining and improving the quality of healthcare services.

Table 9: Significant Difference on the Stress Level between Nurses Working 8-Hour and 12-Hour Shift

Variables	Mean	SD	t-value	t-crit	p-value	Interpretation
12-Hour Shift	3.19	0.31	0.533	1.997	.595	Not Significant
8-Hour Shift	3.25	0.49				

Table 9 showed no significant difference in stress levels between nurses working 8-hour and 12-hour shifts. However, the study emphasized that long or irregular working hours negatively impacted the health and safety of both nurses and patients. Research indicated that such hours reduced nurses' ability to detect adverse changes in patients or address them promptly, leading to diminished patient safety, lower quality of care, unfinished care activities, and increased complaints from patients or families (Bae & Fabry, 2023).

Additionally, prolonged or irregular shifts had severe consequences for nurses, including heightened emotional and mental fatigue, disrupted sleeping and waking patterns, depression, and physical ailments such as musculoskeletal disorders. These challenges often reduced nurses' capacity to manage their workload effectively and contributed to job dissatisfaction, burnout, absenteeism, and difficulties in recruiting and retaining nursing staff (Geiger-Brown et al., 2023).

Irregular work schedules and work overload also led to conflicts between professional and personal responsibilities, negatively affecting family life and decreasing satisfaction with both work and life. Stress was identified as a primary consequence of long and irregular working hours, with unpredictability, lack of control, and overload exacerbated by the demands of the COVID-19 pandemic (Smith et al., 2023). These factors collectively increased stress levels among nurses, further reinforced by their responsibility to care for patients. The study highlighted the need to address these challenges to protect nurses' well-being and ensure the delivery of safe, high-quality patient care.

Table 10: Subjective experiences and perceptions of nurses regarding the impact of shift length on their stress levels and quality of working hours

Participant	Category	Cluster	Themes
1	Challenge in 8 hour and 12-hour shift	The respondent like the 12 hours shift due that she can enjoy her day off and do a lot of personal things unlike the 8-hour day shift.	Impact of shift length on their stress levels and quality of working hours
2		The 12 hours shift is too tiring, the 8-hour shift cannot be felt due to lot of works. The respondent can enjoy her day of its 12-hour shift.	
3		12 hours shift is less stressful because the respondent can accommodate lot of patients and can do his work well unlike 8-hour shift.	
4		The respondent like the 8-hour shift in work so that can rest well at home and the respondent don't want to be over fatigue.	
5		8 hours shift is most stressful than 12 hours shift. The respondent could enjoy his rest day if its 12-hour shift.	
6		12-hour shift is a prolong stress, but he can still enjoy the rest day for 12-hour shift rather than 8-hour shift.	
7		The respondent wants the 12-hour shift because there are lot of things to do, and he can enjoy his rest days with family.	
8		12 hours duty is exhausting and really required his body to rest or take a nap.	
9		He likes 12-hour shift rather than 8 hours shift due to his part time and he like to enjoy the rest days to his family.	
10		The respondent like the 8 hours shift due to family reasons unlike 12-hour shift that really consume her time in the hospital.	

Table 10 showed that most nurses preferred 12-hour shifts because they allowed for more rest days to spend with their families. However, these longer shifts were also reported as stressful and tiring. Nursing staff working in 24/7 facilities were commonly exposed to shift work and extended hours, leading to significant challenges with sleep. These schedules often required sleep at irregular times, misaligned with circadian rhythms, resulting in difficulties falling asleep, frequent awakenings, and early morning waking. This misalignment, combined with insufficient time between shifts and competing personal responsibilities, further reduced sleep quality and duration. Additionally, economic pressures sometimes pushed healthcare workers to take second jobs or work additional hours, exacerbating sleep deprivation (Booker et al., 2023).

Lack of awareness about the importance of sleep also contributed to reduced rest, as some nurses prioritized other activities over adequate sleep. Fatigue-related impairments stemming from these conditions negatively impacted job performance, increasing the likelihood of errors in patient care, which in turn affected employers and the broader community (Geiger-Brown et al., 2023).

Table 11 highlighted the significance of properly structured shifts to address the delicate nature of healthcare. Patients, particularly those requiring round-the-clock care, necessitated both morning and night shifts to ensure continuous attention. Proper shift allocation helped mitigate nurse stress and allowed them to deliver quality care with fewer mistakes. This system reduced stress to some extent, enabling nurses to provide optimal care with minimum errors caused by fatigue and burnout (Smith et al., 2023).

Breaks in nursing were more substantial than in most professions, often structured as shifts rather than short breaks, allowing time for recovery from the strenuous demands of caregiving. Shifts facilitated continuous patient care while mitigating the impact of stress and fatigue. Night shifts, in particular, were seen as beneficial by many nurses, as they often involved lower job demand, providing opportunities for brief periods of rest and enabling nurses to engage in family activities during the day. However, in high-pressure areas such as emergency units, the demands during night shifts could be more intense (Jones & Taylor, 2023).

While shifts have played a critical role in reducing burnout by allowing for shorter working hours and more recovery time, they have not completely resolved the problem of work stress and burnout among nurses. Burnout continued to manifest in various forms, including depersonalization, loss of job satisfaction, emotional exhaustion, and physical fatigue. Despite these challenges, the importance of shifts in lowering burnout levels and supporting nurses' well-being remained essential and cannot be overstated (Bae & Fabry, 2023).

SUMMARY

Based on the findings, it was evident that implementing shifts and reducing long working hours was of paramount importance, particularly for nurses. Nursing, as a delicate profession, demanded workers to be at their best at all times, given the critical nature of their responsibilities, which often involved the health and lives of patients. Nurses deserved reduced working hours compared to other professions to ensure their well-being. Shifts not only provided nurses with the opportunity to rest and recover from work-related stress but also allowed them to engage in leisure activities and spend quality time with family and friends.

Workload and extended hours consistently had negative repercussions for nurses. The demanding responsibility of monitoring patients required significant physical and mental effort to ensure proper care. When nurses worked long hours with excessive workloads, burnout and emotional insensitivity became inevitable. This burnout increased the likelihood of mistakes, some of which could have fatal consequences for patients.

Long working hours had been associated with the nursing profession for centuries, largely because nursing required specialized skills to manage patients with varying health needs. The extensive training and licensing requirements reduced the availability of nurses relative to patient demand. This scarcity often necessitated longer shifts, which led to increased stress and ultimately burnout among nurses. Addressing these issues through better workload management and reduced shift durations was critical to preserving nurses' health, ensuring patient safety, and maintaining the overall quality of care.

CONCLUSION

Health was undeniably one of the most valuable treasures of human existence. This was evident in the fact that an unhealthy individual, during the period of their ailment, was unable to engage in any activity, let alone participate in a productive career. This emphasized the immense value of good health. Over the years, human civilization invested significant resources, time, and effort into establishing hospitals, clinics, and various medical care facilities to address the fragility of the human body when exposed to harmful objects, viruses, and bacteria.

The establishment of these healthcare institutions necessitated trained professionals to administer care and assist patients on their journey to recovery. Among these professionals—such as doctors, medical lab technicians, and radiologists—nurses played a pivotal role. Nurses served as the primary point of contact for patients, overseeing the administration of medication and monitoring the progress of recovery. This role, while critical, was inherently stressful and demanding. Nurses were required to provide round-the-

clock care, making the role highly engaging and exhausting. Such demands made it impractical for a single nurse to work continuously without adequate breaks. The challenging nature of nursing responsibilities highlighted the necessity of extended breaks beyond the usual one-hour work breaks common in other professions. These extended breaks, structured as shifts, were crucial in managing nurses' stress levels and preventing burnout, ensuring they could perform their demanding duties effectively.

RECOMMENDATIONS

According to the research, the investigator discovered that a better balance between work and personal life encompassed various elements, like having more energy for activities during free time, which included heightened social engagement and physical exercise. The researcher aims to encourage colleagues to adopt the common goal of advocating for breaks, assisting nurses in overcoming their hesitance to have others temporarily take over their patients, guiding less-experienced nurses to enhance their time management skills, and developing a strategy that allows nurse managers and other clinicians to provide support more readily when necessary. Provided that nurses persist in supporting 8-hour or 12-hour shifts, hospitals must guarantee that these schedules do not jeopardize patient safety or foster a negative work environment. By focusing on patient safety, hospital leaders can position themselves for ongoing achievement.

Prior to implementing significant changes, healthcare leaders ought to evaluate their current initiatives aimed at fostering a culture of safety. After gaining a solid grasp of their existing environment, they can determine the most effective ways to assist both nurses and patients. Tangible actions that healthcare leaders can implement to foster a culture of safety include:

Hearing and taking the time to listen to employees is essential in all professions; it holds particular significance in a healthcare environment. Leaders ought to establish a consistent, feasible rhythm of individual meetings with nurses and other staff to assess their workloads and determine areas where they require assistance. Allowing nurses to voice their concerns and frustrations fosters communication, enhancing both employee engagement and patient satisfaction.

Encouraging ongoing education, each nurse joins the workforce with a somewhat varied level of experience and educational history. By consistently evaluating their employees' abilities and addressing knowledge gaps through effective ongoing education, leaders can guarantee that their nurses possess the necessary skills to enhance patient safety.

Evaluating staffing practices over time is a primary factor contributing to compromised patient safety. Changing the culture regarding overtime should be a key focus for hospitals aiming to lessen employee fatigue and ensure patient safety. Rather than relying on longer working hours to solve staffing challenges, leaders ought to aim for a more effective mix of permanent and temporary personnel, enhance the management of float pools, increase online staffing capabilities, establish systems to streamline operations, and embrace technology-driven predictions of patient demand and staffing requirements.

Embracing a safety-oriented mindset: the key action healthcare leaders can implement to enhance patient safety is shifting their perspective. Research indicates that changing a hospital's culture demands a shift in priorities. Transitioning from a framework focused on maximizing nurses' efficiency to prioritizing patient safety above everything else is essential—even if it incurs higher costs.

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