PERCEIVED EFFECTS OF NIGHT SHIFT ON NURSES' PHYSICAL HEALTH, PSYCHO-SOCIAL HEALTH AND WORK PERFORMANCE IN A SELECTED SECONDARY HEALTH INSTITUTION, BENIN CITY, EDO STATE

BY

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BENIN CITY

FEBRUARY, 2025

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BENIN CITY

IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD BACHELOR'S DEGREE IN NURSING SCIENCES

FEBRUARY, 2025

DECLARATION

This is to declare that this research project titled "**PERCEIVED EFFECTS OF NIGHT SHIFT ON NURSES' PHYSICAL HEALTH, PSYCHO-SOCIAL HEALTH AND WORK PERFORMANCE IN A SELECTED SECONDARY HEALTH INSTITUTION, BENIN CITY, EDO STATE** ." will be carried out by **OLUGBENGA BUNMI MERCY** is solely the result of my work except were acknowledged as being derived from other person(s) or sources.

MATRICULATION NUMBER: **BMS1701967**

DEPARTMENT/SCHOOL: NURSING SCIENCE, SCHOOL OF BASIC MEDICAL SCIENCES, UNIVERSITY OF BENIN, BENIN CITY.

Signature: …….

Date: …….

CERTIFICATION/APPROVAL

This is to certify that this research project by **OLUGBENGA BUNMI MERCY** with Matriculation number **BMS1701967** has been examined and approved for the award of "Bachelor's of Nursing Science (B.Nsc)" in the Department of Nursing Science, School of Basic Medical Sciences, University of Benin, Benin City.

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ABSTRACT

This study was aimed to determine the perceived effects of night shift on nurses' physical, psycho-social health and work performance in selected health institutions Edo State. The study adopted a descriptive cross-sectional research design and convenience sampling method was used to select one hundred and sixty-nine nurses in Central Hospital and Faith Mediplex Hospital, Benin City, Edo State. A well-structured questionnaire was used as instrument for data collection. The data was analysed using descriptive and inferential statistics. Simple frequency and percentage were used to describe the data, while chi-square was used to test the hypotheses. The level of significance was set at $p<0.05$. The analysis was performed using the IBM Statistical Package for Social Sciences (SPSS) version 28.0 for windows. The result showed that majority of the respondents perceived night shift to have effect on their physical, psycho-social health and work performance in Central Hospital and Faith Mediplex Hospital, Benin City, Edo State. According to the results, It shows that 135(79.0%%)nurses agreed that night shift had negative on their physical health while 34(20.1%)nurses agreed that night shift had positive effect on their physical health. It shows that 124(73.4%%) nurses agreed that night shift had negative on their psychological health, while 45(26.6%)nurses agreed that night shift had positive effect on their psychological health. It shows that 117(69.2%%)nurses agreed that night shift had negative on their social health, while 52(30.8%)nurses agreed that night shift had positive effect on their social health and lastly, It shows that 135(79.9%%)nurses agreed that night shift had negative on their work performance., while 34(20.1%)nurses agreed that night shift had positive effect on their work performance. Also, sociodemographic characteristics namely sex, marital Status, educational qualification, years of experience, and religion were significantly associated with nurses' physical health and psychological health; years of experience, cadre, ethnic group and religion was significantly associated with nurses social health. All sociodemographic variables except religion were significantly associated with nurses work performance. This study therefore, recommended that there is need for Institutions to make concerted efforts to ensure that the effect of night shift on nurses' physical, psycho-social health and work performance is assessed and taken care of as their health is important in delivery of quality care to patients.

Keywords: Night shift, nurses, physical, psycho-social, health, work performance.

DEDICATION

This research project work is dedicated to Almighty God for his grace through the period of this research and to my dear parents and sponsor, Mr & Mrs Olugbenga Okunrinkoya and Mr Isaac Olugbenga for their continuous support and encouragement throughout this journey.

ACKNOWLEDGEMENTS

My sincere gratitude goes to Almighty God for his grace, strength, mercy, love and kindness upon my life throughout the period of my study and for making this research work a success. I am glad to acknowledge and appreciate my project supervisor Dr T.A. Ehwarieme, for the support, guidance and advice throughout this research study, may the Almighty God continue to bless you and your family.

Special thanks to the Head of Department, Nursing Sciences Dr. (Mrs.) R. E. Esewe and my course adviser Sr J. N. Chukwurah, as well as, Prof. F.U. Okafor, Dr. (Mrs). J.N. Oko-ose, Dr. (Mrs.) C.E. Omorogbe, Dr (Mrs.) J.A. Afemikhe, Dr. (Mrs.) C. Enuku, Mrs. F. Amiegheme, Mrs. S.O. Bolaji-Osagie, Mrs. Elusoji, Mrs. Usoh, Mrs. Oyana, Mrs. M.A. Iniomor Mrs Edo-osagie, Mrs. V.C. Chegwe, Mrs. H.E. Natufe as well as non-academic staff and technologists and all other lecturers for their immense contribution, dedication and commitment to the success of this research work. I am glad to be under your guidance. Thank you for all your tremendous advice and for the knowledge you have instilled in me.

Special appreciation goes to my parent and sponsor Mr & Mrs Olugbenga Okunrinkoya, Mr Isaac Olugbenga and Mr & Mrs Osula, my mentor, Mrs. I.N. Orobiyi, my siblings, Miss Kemi and Miss Dorcas for their prayers, support and understanding throughout the period of this academic pursuit, also to my close friends (George, Stella, John, Paul, Mercy, Terry, Margaret, Benedicta, Chinaza and Godgift) and fellow course mates for their encouragements at one time or the other and for their support in the pursuit of my career.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Shift-work is a standard method of professional practice and is unavoidable for many nurses, this is because hospitals and nursing services run a 24-hr operation (Alsharari et al., 2021). Twelve-hour shift rotations are very common worldwide, but there are growing concerns about its impact on care quality and patient safety (Alsharari et al., 2021). The National Sleep Foundation defines shift work as work that occurs on a schedule other than the usual 9:00 to 17:00 every day (Dires et al., 2023). This may include evening or night, early morning, and rotational shifts. Working at night disrupting natural processes, results in circadian misalignment, disturbed sleep, and light-induced suppression of melatonin levels at night; also, lab results indicate that cardiometabolic stress and cognitive impairment are increased through shift work and sleep loss (Alsharari et al., 2021) .

Many essential professions are required to work continuously and to provide high quality service to their clients around the clock, but this is limited by individual, financial and organizational factors; It is estimated that >20million Americans and Europeans work night shifts, and health-care workers represent a large proportion of this population (Qanash et al., 2020). Evidence suggests that working at night has consequences on nurses physical and mental health, with ramifications on job performance and satisfaction; drowsiness, fatigue, sleep deprivation, and poor sleep quality have been identified by those who work at night (Weaveret al., 2020). These services arrange their work schedules based on shift work that may last up to 24 hours (Qanash et al., 2020). Night shift health-care workers have been observed to engage

in higher error rates and worse patient safety outcomes compared with their colleagues working day hours; this was partially related to circadian rhythm derangement and sleep related disorders (Kecklund & Axelsson, 2021). Sleep deprivation itself has been linked to cardiovascular morbidity, metabolic syndrome, psycho-social disorders and an overall decline in well-being (Wyse et al., 2020). Furthermore, self-reported well-being has been associated with improved quality of sleep and productivity.

Nurses play a critical role in providing round-the-clock care and support in the healthcare system (Hassmiller, 2021). However, the demands of working night shifts can result in significant stress and sleep disturbances, impacting the overall well-being and quality of life of nurses (AL-hrinat et al., 2024). They work day and night in the hospital worldwide to deliver care to patients (Dall'Ora & Dahlgren, 2020). Nurses involved with night shiftwork have encountered several challenges with their job performance and patient safety (Alsharari et al., 2021). The disruption to nurses' circadian rhythms impacts performance, and nurses working at night have more work-related injuries and a significantly increased risk of drowsy driving incidents after working a night shift; sleep-related errors have been identified for night shift workers, and research has found that night-shift napping decreased sleepiness and improved performance. Beyond sleep deprivation, night shift work may also have other physiological effects on nurses; some studies have reported that adverse effects of night shift-work on the physiological status of nurses include anxiety, musculoskeletal disorders, stress and development of obesity from poor feeding habit (Booker et al., 2020). Night shift work nurses often face psychiatric health problems such as depression, occupational stress, and anxiety (Dall'Ora et al., 2020). Among these psychiatric health problems, emotional exhaustion of nurses is a major concern

because of its potential impact on quality and safety of patient care (Shah et al., 2021). Moreover, emotional exhaustion is one of the reasons why nurses leave their job and the profession.

Numerous individuals desire to work the night shift because there are fewer disturbances and interruptions from administrative personnel, fewer meetings, shorter commutes since there is less traffic, and receive higher pay (Morelock, 2020). However, studies have shown that the night shift can have physical and psychological effects on nurses' health and their job performance (Books et al., 2020, Merchaoui et al., 2020). Night shiftwork, which requires nurses to work at night and sleep during the day, also significantly alters the circadian rhythm of affected persons (Kerkhof, 2021). Working the night shift also has an effect on workers' mental well-being, can cause mood changes, and result in work-to-family conflict (Books et al., 2020).

Worldwide, accumulated data show that nursing is a demanding and stressful profession; nurses work in complex environments, on variable and long rotating shifts, and are exposed to a variety of occupational risks and accidents (Elbejjani et al., 2020). Studies have shown that nurses suffer from physical illness, mental disorder, and emotional exhaustion more than other health practitioners in the general population (Azizoğlu et al., 2021). Some studies have shown that night shiftwork is associated with poor performance and adoption of low safety indicators when such shifts are performed within a rotating shift schedule (Niu et al., 2020). Burch et al. (2021) showed that fixed night shiftwork could be associated with increased job dissatisfaction. More-so, the challenges of shiftwork are associated with intention to leave the profession and thus, turnover of nurses and night work has been found to be a risk factor for future disability retirement (Ropponen et al., 2022). These

challenges have led to calls for the introduction of napping during night shifts among nursing staff (Li et al., 2020).

1.2 Statement of the Problem

Night shift work has been associated with sleep disturbances, disrupted circadian rhythms, altered physical and mental health, complicated interpersonal relationships, and a decrease in the quality of nursing care (Li et al., 2020).Researchers clinched that night shift work has been associated with an increased risk of developing breast cancer, colorectal cancer, obesity, and type-2 diabetes (Books et al., 2020). Also, studies have showed that professionals working the night shift experience poor health status, providing further evidence that night shift workers' health is at risk (Awosoga et al., 2020).

Night shift work is associated with an increase in pro-inflammatory markers and the development of risk factors leading to metabolic syndrome (Bahinipati et al., 2022). There is also an increased risk of family stressors, and mood changes because of working the night shift (Books et al., 2020); nurses who work the night shift may experience decreased ability to provide optimum care for their families and for their own needs, which also affects their ability to provide maximum care to the patient and their families (Dires et al., 2023). Cognitive performance has been seen to be impaired more during the night shift so this affects the work performance of healthcare workers (Kazemi et al., 2021) ; and also night shift work is associated with impaired alertness and work performance due to sleep loss and circadian misalignment (Ganesan et al., 2022).

A study conducted in South Africa showed that night shift work causes psychosocial strain and physiological strain for nurses. Nurses had more complaints about the night

shift than the day shift (Dires et al., 2023). In an Ethiopia study conducted to assess shift-related sleeping disorders showed that a quarter of shift workers, and nurses are suffering from shift work sleep disorders. The number of nights on average per month for the last year and working in three-shift rotations were significantly associated with shift work sleep disorders (Haile et al., 2022).

Many works have been done in some other areas, but few works have been done in regards to this in Edo state, due to this the researcher sees a need to determine the negative effects of night shift on the physical, psychological and work performance of nurses in Secondary Health Institution in Edo State; how these health issues can be prevented and how to maintain the well-being of nurses in all aspect of health.

1.3 Objectives of the Study

The main objective of this study is to assess the perceived effects of night shift on Nurses' health and work performance in a selected secondary health institution in Edo State.

1.4 Specific objectives of this study is:

1. To access the perceived effects of night shift on Nurses' physical health in a selected secondary health institutions in Edo State .
2. To determine the perceived effects of night shift on Nurses' psychological health in a selected secondary health institutions in Edo State.
3. To ascertain the perceived effects of night shift on Nurses' social health in a selected secondary health institution in Edo State.
4. To determine the perceived effect of night shift on Nurses' work performance in a selected secondary health institution in Edo State.

1.5 Research Questions

1. What are the perceived physical effects of night shift on Nurses' health in a selected secondary health institution in Edo State.
2. What are the perceived psychological effects of night shift on Nurses' health in a selected secondary health institutions in Edo State.
3. What are the perceived social effects of night shift on Nurses' health in a selected secondary health institution in Edo State.
4. What are the perceived effect of night shift on work performance of nurses in a selected secondary health institutions in Edo State.

1.6 Hypotheses

1. There is no significant association between the perceived effects of night shift on Nurses' physical health and their sociodemographic characteristics.
2. There is no significant association between the perceived effects of night shift on Nurses 'psychological health and their sociodemographic characteristics.
3. There is no significant association between the perceived effects of night shift on Nurses' social health and their sociodemographic characteristics.
4. There is no significant association between the effect of night shift on nurses' work performance and their socio-demographic characteristics.

1.7 Significance of the Study

Nurses are mostly responsible for caring for their patients and this can only be done with their presence in the hospital depending on the shifts. As a result, this research will discuss and provide information on physical, psychological, social health, and work performance; it will discuss shifts, the types, and the perceived effects of night shifts on Nurses physical, psychological, social health, and work performance. It will give relevant healthy living lifestyles and habits nurses could adopt so as to improve

their physiological and psycho-social health. Also, result from this study will show the effect of night shift on the above three aspect of health of the nurse and their performance at work in Central Hospital and Faith Mediplex Hospital Benin city, Edo State. , Edo State; which in turn is very important both in knowing how nurses render their duties during night shifts, the well-being of the Nurse and patients to be cared for. Additionally, this study will add to the body of information on this topic and serve as a starting point for other researchers who may wish to build on the effect of night shift on nurses.

1.8 Scope of the study (delimitation)

This study is delimited to the perceived effects of night shift on Nurses' health and work performance in a selected secondary health institution in Edo State.

It is also delimited to the objectives that guided this study. This study is equally delimited to nurses working in a secondary health institution in Edo State.

1.9 Operational Definition of Terms

Perceived effects: this refers to what nurses think about the impact night shift does to their physical and psycho-social health.

Night shift: this refers to shift nurses work at night time of the day.

Nurses: this refers to registered nursing staff who work night shift.

Physical health: this refers to physiological well-being of nurses from working night shift.

Psycho-social health: this refers to psychological and social well-being of nurses from working night shift.

Work performance: this refers to how nurses carry out their nursing duties with respect to working night shifts.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter focused on the related literature review under the following headings: conceptual review, theoretical review, and empirical review from textbook, published and unpublished articles and journal.

2.1 Conceptual review

2.1.1. The Concept of Shift

Shift work is when employees are required to work outside of the traditional nine-to-five shift; this could involve working nights, split shifts, rotating shift patterns, and early or late hours regularly (Redeker et al., 2020). Shift workers may also participate in shift swapping with colleagues, which helps create a more balanced workload for everyone involved.

2.1.2 Types Of Shift

According to the Bureau of Labor Statistics (2020), shift work schedules are divided into three general categories;

1. **Evening:** This category represents shifts that fall within the hours of 6pm to 10pm. Common occupations with evening shifts include:

- Servers and preparers, bartenders, and other food service employees
- Hairdressers, salon staff, personal trainers, and other personal care employees
- Retail store workers, real estate agents, cashiers, and other sales personnel

- Musicians, directors, broadcast technicians, and others who work in the arts, sports, health-care, and media

2. **Early Morning:** An early morning shift includes the hours of 4am to 8am. Typical occupations that include these shifts include:

- Architects and engineers
- Carpenters, equipment operators, roofers, and other construction and extraction workers
- Farmers, fishing workers, and forestry personnel
- Aircraft and industrial machinery mechanics, telecommunications equipment repairers, and other installation, maintenance, and repair professionals follow shift work schedules.

3. **Night shift:** The UK government defines night work as a shift of at least three hours between 11 p.m. and 6 a.m; also, in the United States night shift for nursing occurs most commonly between 7 p.m. or 11 p.m. and 7 a.m. (Dires et al., 2023). The healthcare sector relies heavily on the dedication and commitment of nurses who work tirelessly around the clock, including night shifts, to ensure the delivsery of quality patient care.

Night work includes any shifts that fall between the hours of 11pm and 3am. Common jobs that include night shifts include:

- Doctors, nurses, paramedics, and other healthcare practitioners
- Nursing assistants, psychiatric aides, veterinary assistants, and other healthcare support staff

- Firefighters, police officers, security guards, and other protective service employees
- Bakers, machinists, assembly line workers, and others who work in manufacturing and production
- Truck drivers, air traffic controllers, conveyor operators, and other transportation and material moving employees.

Other types of shift work schedules (Bonifacio, 2024):

- **Fixed shifts:** Employees who work a fixed shift will likely have the same weekly days and hours. Exceptions could be made if they are needed to cover overtime shifts, take holidays off or switch up their schedule from time to time; however, most employees with this kind of arrangement can anticipate that their calendar won't surprise them too often.
- **Split shifts**: Employees who work split shifts will have two or more shift days with breaks in between. For example, an employee may start at 8 am, finish at midnight, and then return to work later that afternoon for another shift from 4 pm to 8 pm.
- **Rotating shifts:** Employees who work rotating shifts may experience a day shift one week followed by work night shifts the next. This shift work schedule can benefit those who want to maximize their hours. However, adjusting to the constantly changing schedule cannot be easy.
- **On-call shift:** Employers rely on employees who are available to work during their on-call shifts, even though they may not physically be at the workplace. Employees must stay accessible by phone as outlined in company policy and can expect to arrive quickly if summoned.

Benefits Of Shift Work

- **Suited to night owls and morning people:** People who feel more motivated and productive after the sun goes down may thrive during a night shift, whereas people who concentrate better in the pre-dawn hours may benefit from an early morning shift.
- **Easier Commuting**: By avoiding roads and highways during peak traffic times, you'll be able to get to work more quickly than many daytime commuters.

Disadvantages Of Shift Work

- **Sleep Problems:** Shift work disorder is a medical condition that affects people who work non-traditional schedules. The disorder is characterized by insomnia symptoms when the person tries to sleep and excessive sleepiness when they are awake. Even if their symptoms do not develop into a disorder, many shift workers struggle with falling or remaining asleep during the day when rest is needed and staying awake during their shifts. Hormonal disruptions of cortisol and testosterone levels can affect the quality of life and cause fatigue, low energy levels, and decreased libido.

  Life Disruptions: Working at night and sleeping during the day can interfere with family life, as well as socializing with friends or colleagues.
- **More Hazardous Driving Conditions:** While shift workers contend with less traffic, they are at higher risk of being involved in an accident related to drowsy driving. Most of these collisions occur either between midnight and 6 am, or in the late afternoon, and the majority involve single drivers with no passengers.

2.1.3 The Concept of Physical Health

Physical health is a metabolic and cognitive state that involves the absence of any disease and it is obtained through sports, nutrition, and/or ergogenic aids that enable persons to have a suitable life with maximum functionality (Garcia-Falgueras 2020).it can also be referred to as the condition of your body, taking into consideration everything from the absence of disease to fitness level. A person who has good physical health is likely to have bodily functions and processes working at their peak; this is not only due to an absence of disease but regular exercise, balanced nutrition, and adequate rest all contribute to good health (Felman, 2023). Nurses are exposed to different physical health problems such as loss of sleep, muscular strain, persistent tiredness, and backache (Dires et al., 2023).

Factors that affect physical health

Physical health is critical for overall well-being, and can be affected by:

- Lifestyle: diet, level of physical activity, and behaviour (for instance, smoking)
- Human biology: a person's genetics and physiology may make it easier or harder
- to achieve good physical health
- Environment: our surroundings and exposure to factors such as sunlight or toxic substances
- Healthcare service: good healthcare can help prevent illness, as well as detect and treat illness.

Ways to improve Physical health

- **Exercise**: Physical activity is a great way to keep a person physically healthy . it helps in the releasing of feel-good chemicals called endorphins in the brain. Finding an activity one enjoys can make them feel less stressed, more focused, and give them a sense of purpose.
- **Good nutrition:** Eating well can improves the physical wellbeing of an individual. Balanced diet which includes healthy amounts of proteins, essential fats, complex carbohydrates, vitamins, minerals and water influences the development,management and prevention of numerous physical health conditions.
- **Staying away from bad habits** such as smoking will postively impact an individuals physical health. It's never too late to quit a bad habit, and there are now a lot of support groups available to help with that.
- **Making regular hospital appointment:** routine check ups or screening, can help to improve physical health of people by helping to know lifestyles to adopts and do away with, early diagnosing of health problems and treatment.

2.1.4 The Concept of Psycho-social Health

Psycho-social health is a term used to comprehend the already established factors involved in mental health and psychological well-being; it can be interpreted as the sexual, emotional, social, environmental, cognitive, religious, moral and spiritual satisfaction of a perPological health and social life problems such as irritability, systematization, obsessive–compulsive disorder, interpersonal sensitivity, anxiety, altered mood, and paranoid disorders were significantly higher.

2.1.5 Psychological Health

Psychological well-being is a multifaceted and multidimensional construct that encompasses an individual's overall happiness, satisfaction with life, and mental and emotional health. It includes key components such as positive emotions, autonomy, positive relationships, low levels of negative emotions, purpose in life, life satisfaction, and personal growth (Dhanabhakyam1 & Sarath, 2023).World Health Organization (WHO) defines psychological well-being as "a state of mind in which an individual is able to develop their potential, work productively, and creatively, and is able to cope with the normal stresses of life" (WHO, 2021); this definition highlights the multidimensional nature of psychological well-being, with the presence of affirmative emotions, psychological functioning, and a sense of purpose and significance in life.

Components of positive psychological functioning

Psychological well-being includes the following six components of positive psychological functioning:

1. Positive evaluations of oneself and one’s past life (self-acceptance).
2. A sense of continued growth and development as a person (personal growth).
3. The belief that one’s life is purposeful and meaningful (purpose in life).
4. The possession of quality relations with others (positive relations with others).
5. The capacity to manage effectively one’s life and surrounding world (environmental mastery).
6. A sense of self-determination (autonomy).

Factors Relevant to Psychological Well-Being

To understand Psychological health and how to achieve or help others to achieve it first requires consideration of behaviors, cognition, and motivations, as well as spiritual factors, that contribute to it. The behaviors that affect PWB include:

1. **Exercise**: People who engage in physical activities such as more satisfied with their lives and live happier than individuals who do not. Specifically, individuals who exercised two to three times per week are less depressed, angry, and stressed; are more trusting; and perceived their health to be better compared to people who do not exercise much (Yarnell et al.,2021). Exercise is important for everyone, but may be especially beneficial for people with psychological problems (eg, major depression)

2. **Leisure:** These activities also enhance psychological health; activities like tai chi, yoga, and group activities improves an individual psychological health by reducing stress, anxiety, improving mood, increasing self-esteem, and reducing social isolation. Satisfaction with leisure activities clearly correlates with benefits to psychological well-being (Yarnell et al.,2021).

3. **Nutrition:** Eating fruits, vegetables, lean meat, fish, and whole grains is linked to positive psychological health and fewer depressive symptoms(Yarnell et al.,2021), whereas a diet of processed or fried foods, refined grains, sugary products, and beer is associated with poorer outcomes (Blanchflower et al., 2020). Comfort foods typically, foods high in sugar and carbohydrates enhance psychological health temporarily; for example, eating ice cream is likened to creased positive affect. However, too much intake of these kinds of foods can lead to excessive weight gain that may decrease psychological well-being over time. Also, food deprivation

generally decreases psychological health and is related to psychological distress; the term “hangry” has been coined to describe situations in which a person is angry as a result of hunger. Although this word may be amusing, it is a fairly common phenomenon and is possibly related to decreases in self-control as a result of hypoglycemia.

4. **Sleep:** People spend more than a quarter of their lives sleeping, and quality sleep affects psychological well being of individuals. Most healthy adults need 7 to 9 hours of sleep each night; however, most individuals like nurses do not get enough sleep (or enough quality sleep) (Sonnentag, 2022). Lack of sleep negatively affects individuals psychologically.

5. **Drug Use:** The use of drugs whether legal (eg, alcohol, nicotine, caffeine, or drugs prescribed to the user) or illegal (eg, street drugs such as opiates, prescription drug abuse, or inappropriate use of performance enhancing drugs) can affect the psychological health of people.

Ways to improve psychological health

1. Encouraging individuals to engage in physical exercise
2. Healthy eating
3. Adopting good sleep patterns
4. Mindfulness: this is when individuals are intentionally being acutely aware of what is going on internally and externally without reacting. This can be helpful for many operational, leadership, and personal activities and is likely beneficial for enhancing resilience and overall health.
5. Individuals engaging in optimistic thinking;

6. Spirituality: having a deity to relay our problems to could also help our psychological well-being.
7. Having a good social support to fall on when things are going south.

2.1.6 Social Health

Social health refers to the health of a person with reference to their ability to interact with others; it also refers to the health of a society in general (Hassanpour et al., 2021).It focuses on how the members of a society treat each other, behave with each other, what kind of social environment prevails, how the prevailing customs and traditions guide the behaviour of individuals towards self, each other and towards the society as a whole. Social Health also includes how individual's natural environment around them is, and how the role of the community as a whole acquires great importance for enhancing and maintaining the quality of the health of individuals (Hassanpour et al., 2021).

Benefits of positive Social health

Studies have shown that increasing social health can ultimately have the following benefits:

- Increase the productivity of health interventions
- Reducing the infant mortality rate and reducing the death rate due to specific causes.
- Increasing life expectancy and, ultimately, life expectancy.
- Promoting the human development index of communities.
- Better access to education and health information.
- Optimal design of patient support and care systems.

- High effectiveness of prevention and lifestyle modification programs

Factors that affect social health

According to WHO (2018),the following are social determinants of health, which can influence health equity in positive and negative ways:

- Income and social protection
- Education
- Unemployment and job insecurity
- Working life conditions
- Food insecurity
- Housing, basic amenities and the environment
- Early childhood development
- Social inclusion and non-discrimination
- Structural conflict
- Access to affordable health services of decent quality.

Ways to improve Social health

- **Education:** Being educated is extremely important, as it gives people the authority to take the right decisions about your health and welfare. For instance, education empowers people to choose the right living and working conditions that help improve their social health. Additionally, education makes them aware and ensures that they pay attention to their health.

- **Income:** A good earning is often linked to a better quality of life. This is extremely important when it comes to maintaining social health.

- **Housing facility:** The living condition of person tend to impact the overall health and well being of an individual. However, not everyone can afford good housing facilities because it depends on the earnings, the expenses and of course the convenience of the family. The neighborhood pretty much defines the conditions that a person live in. For instance, if a person lives in a neighborhood known for theft, fights and murders, maintaining social health will be a challenge. The physical environments impact social health in a big way as they affect individual behavior and impact overall health outcomes.

- **Self love:** A very important factor that tends to have a huge impact on social health is the ability of the individual to give preference to his or her needs. How many times a person listens to their heart and indulge in stuff that they like to do, displays self love. This in turn, plays a crucial role in ensuring the social activity and hence social welfare of the individual.

- **Meeting new people:** One of the first symptoms of poor social health is social isolation. This stems from the hesitance to meet people, build healthy relationships, make new friends, talk to them, etc. Therefore the journey to overcome this issue also starts with the practice of socializing. Of course, it will be difficult to go all out and socialize.

Trying new things: this gives a person the chance to pursue an interest. In this process, they will come across like-minded people, get a chance to interact with them and this will help build a social circle.

- **Being approachable:** No one is going to come forward to make friends with a person if they are not approachable. Simple things like keeping oneself clean and well-groomed go a long way in making them look presentable. Also, body language and attitudes makes it easy for people to approach a person.

- **Use technology:** In today's fast paced world, we may not have the time to meet people physically. But with technology, we will always have the option to catch up anytime, anywhere. One of the reasons why social health suffers is that people often ignore the need to stay in touch. Sometimes they blame it on their work schedule and sometimes it is just the distance that makes it difficult to reach out in person. But, with the likes of video calling facilities like Skype, Google Duo and so many more, staying in touch with people has become easier.

- **Good Sleep:** Social health also depends on mental and emotional fitness. Not having proper rest, makes a person to likely wake up all grumpy with a short temper. This will clearly not help when trying to socialize.

2.1.7 The Concept of Work Performance

Work performance can be defined as an individual behaviour, something that people do, that can be observed to generate value for organization and contributes to the organization's goals (López-Cabarcos et al., 2022). It is probably the most important and studied variable in industrial management and organizational behaviour (Carpini et al., 2021). It can also be understood as an achievement-related behaviour with some evaluative component (López-Cabarcos et al., 2022), that is, the extent to which an employee meets general organizational performance expectations.

Nursing work performance is defined as providing nursing care to the patient based on the nurses' professionalism and all other related activities and processes (Choi,

2020). By improving nursing work performance, nurses can cope with changes in the medical environment and the patient's needs according to the times by applying their skills and knowledge (Cho & Kim, 2022).

2.1.8 Factors That Affect Work Performance

According to Diamantidis & Chatzoglou, (2021), the following are factors that affect work performance of people:

- **Firm/environment-related factors:** Firm/environment-related factors such as management support, training culture, organizational climate and environmental dynamism. When employees perceive that the management supports their job-related efforts, then it is likely that improved job performance will be noticed. Also, the organizational climate influences employees' attitudes and behaviors and hence their performance levels and pro-activity level. The organization's training culture affects employee's behavior, and is related with the level of employees' motivation as the acquisition of new knowledge and skills through training leads to improved work performance. Additionally, environmental dynamism affects firm performance; when a firms' external environments are dynamic, then it is difficult for them to predetermine their employees' efficiency levels. In other words, in a dynamic environment, the job itself and its performance acquire unique characteristics.
- **Job-related factors:** Job communication, job autonomy and job environment are job related factors to work performance. Job autonomy is the extent to which "the job allows the employee to make decisions about how to perform his work" (Diamantidis et al., 2021). It reflects the degree of freedom and independence that employees have in decision making regarding the way they perform their jobs;

thus, employees with increased job autonomy have more flexibility in their work because they choose how to execute their jobs more efficiently and thus their performance is increased. Also, job environment affects employee productivity and performance, it affects employees' ability to be proactive and productive. Then, job communication is related

with commitment and motivation, and is an important factor that can leads to higher firm performance levels.

- **Employee-related factors and employee performance:** Pro-activity, adaptability, intrinsic motivation, skill flexibility, commitment and skill level are employee-related factors to employee performance. Employing people who have a variety of skills is a valuable asset for a firm, because it forms the basis for creating multiple alternatives to current or future job requirements. Also, in order for work performance to be improved through increased employee performance, organizations should strengthen employee motivation.

Ways to improve work performance

The following are ways to improve work performance (Perry, 2022):

- Limit distractions
- Set milestones
- Set clear and achievable goals
- Improve your time management
- Do important tasks first
- Delegate tasks whenever possible
- Clear your workspace

- Staying healthy
- Communicate clearly
- Prioritize self-improvement
- Maintain work-life balance

2.2 Perceived Effects Of Night Shift Work On Nurses

Night shift work, however, presents unique challenges that can impact nurses' physical and psycho-social health, as well as their work performance. The following are perceived effects of night shift work on nurses:

2.2.1 Effects of Night Shift On Nurses' Physical Health

Night shift work disrupts the natural circadian rhythm, leading to sleep disturbances and fatigue among nurses (Weaveret al., 2020). Chronic sleep deprivation and irregular sleep patterns have been linked to various adverse health outcomes, including increased risk of cardiovascular diseases, metabolic disorders, and compromised immune function. Moreover, nurses working night shifts often face challenges in maintaining a healthy diet and engaging in regular physical activity, further exacerbating the risk of chronic health conditions (Dires et al., 2023).

2.2.2 Effects of Night Shift On Nurses' Psycho-social Health

The psychological and social impact of night shift work on nurses cannot be understated. Prolonged exposure to night shifts can lead to feelings of isolation, social disconnection, and impaired family and social relationships due to conflicting schedules (Dires et al., 2023). Additionally, nurses may experience higher levels of stress, anxiety, and depressive symptoms because of the constant disruption to their sleep-wake cycle and the demanding nature of their work environment. Burnout and

compassion fatigue are also prevalent among nurses working night shifts, contributing to decreased job satisfaction and overall well-being (Awosoga et al., 2020).

2.2.3 Effects of Night Shift on Nurses' Work Performance

The effects of night shift work on nurses' work performance are multifaceted. While some nurses may adapt well to working during the night and maintain high levels of productivity, others may experience difficulties in concentration, decision-making, and communication due to fatigue and sleep deprivation (Dires et al., 2023). Increased risk of medication errors, patient safety incidents, and reduced quality of patient care have been reported during night shifts, highlighting the importance of mitigating strategies to support nurses' performance in this challenging work setting.

Recognizing and addressing the perceived effects of night shift work is crucial to safeguarding nurses' well-being and ensuring the delivery of safe and high-quality patient care. Interventions such as implementing adequate rest breaks, providing education on sleep hygiene and stress management, fostering supportive work environments, and promoting a culture of self-care are essential steps toward mitigating the negative impact of night shift work on nurses (Awosoga et al., 2020).

2.3 Theoretical Framework

The theoretical framework utilized in this study is Punnett theoretical framework; this theory reveals that the connection between working conditions and employee health is multifaceted (Al-Hrinat et al., 2024). According to the framework, health behaviors, including sleep patterns, play a significant role in the relationship between working conditions and employees' health and quality of life. Unfavorable working conditions, such as exposure to night shift stress, can directly impact an employee's physical and mental well-being, as well as their quality of life. Moreover, night shift stress can lead

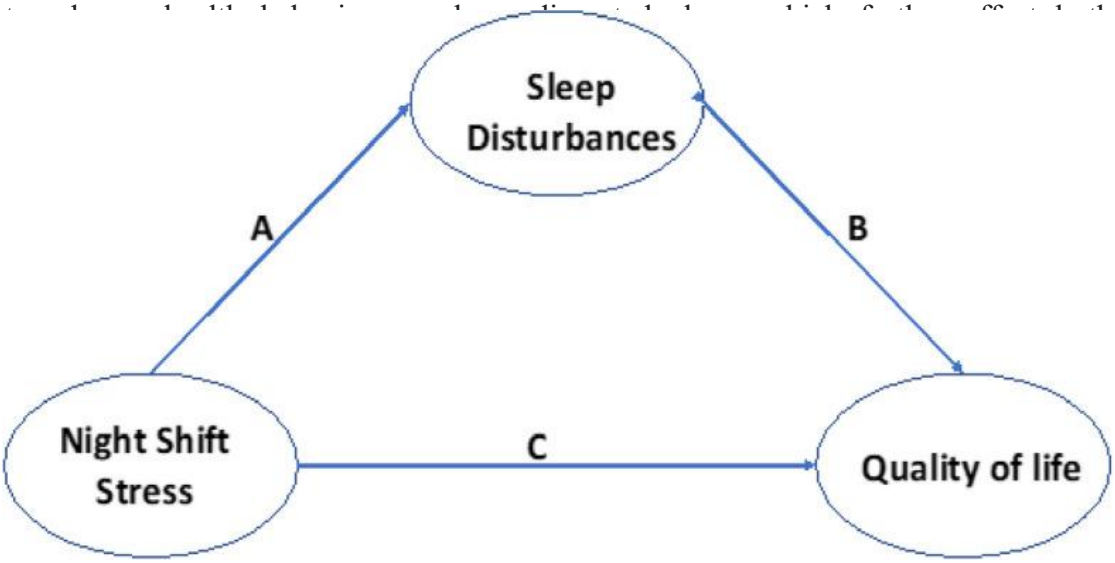

Figure 2.1: Control and support, can act as protective factors for an individual's health

From figure 2.1 the theoretical framework proposes that sleep disturbance acts as a mediator between night shift stress and quality of life. This means that the impact of night shift stress on quality of life is not only direct (path c), but also indirect through its effect. Drawing from Punnett proposed pathways and existing research findings, the following hypotheses were postulated (Al-Hrinat et al., 2024):

- HA: Night shift stress positively associated with Sleep disturbance among nurses.
- HB: Sleep disturbance negatively associated with quality of life among nurses,
- HC: Sleep disturbance mediates the relationship between night shift stress and quality of life.

2.3.1 Application Punnett theoretical framework to the Study

This theory is applicable to this study because, when nurses are aware of the impact of night shift stress on their physical and psycho-social health and work performance e.g. fatigue, social isolation, anxiety, reduced quality patient care etc., and the perceived severity to their health and work performance e.g. increased patients incidence etc, organizations will set up positive working conditions, such as high levels of control and support, to act as protective factors for an individual's health to help with nurses working night shifts health and work performance.

2.4 Empirical Review

2.4.1 Perceived Effects of Night Shift on Nurses' Physical Health

Alsharari, (2021) on the impact of night shift rotations on nursing performance and patient safety. This study used a descriptive predictive correlational design using a self-administered questionnaire, electronic and printable survey questionnaires were distrusted among nurses working in public hospitals in multiple regions of Saudi Arabia. The study recruited 1,256 nurses from different nationalities, hospital work units and work experience. Results showed that a large proportion of (93.6%). nurses on night shiftwork encountered physiological consequences on their health and work performance. It was concluded in this study that majority of the nurses suffered physiologically from night shift.

Another study by Dires et al (2023) in a study assessment of night-shift effects on nurses' health and work performance at south gondar zone public hospitals. A cross-sectional study design was conducted at four hospitals, which are Debre Tabor Comprehensive Specialized Hospital, Addis Zemen Primary Hospital, Mekane Eyesus Primary Hospital, and Nifas Meucha Primary Hospital. A structured self-administered questionnaire was used to collect the data from 1st December 2021 to 1st February 2022. Data were entered into *Epi* data version 4.2 and then exported to SPSS version 24 for analysis; data were summarized by using percentages and frequencies and the association between demographic factors and feelings of nurses about night shift work was assessed by using a bivariate and multivariable logistic regression model. Results from this study revealed some of the physical effects of night shift on nurses health and work performance which included 8 (27.9 %) nurses had a loss of sleep, 60(24.6 %) nurses had muscular strain, and 24 (9.8 %) nurses had been exposed to needle stick injury. This study revealed that night shift had a negative effect on a number greater than half of the nurse's physical health.

Also, a study by Books et al., (2020), on Night Shift Work and Its Health Effects on Nurses. A quantitative study using descriptive design; it also incorporated three qualitative open-ended questions to complement the study. The data were collected using Survey Monkey, with an Internet based confidential data collection tool. The population of relevance to this study was nurses employed in hospital settings in the United States. Results indicated that night shift has an increased risk of sleep deprivation in nurses which led to negative health consequences including obesity and fatigue.

More-also, Al-Hrinat et al., (2024) in a study the impact of night shift stress and sleep disturbance on nurses quality of life: case in Palestine Red Crescent and Al-Ahli

Hospital, a cross-sectional study aimed to investigate the impact of night shift stress and sleep disturbance on the quality of life among nurses working in Palestine Red Crescent Society and Al-Ahli Hospital. Convenience sampling was used to recruit 189 full-time registered nurses with at least one year of job experience. The participants completed a questionnaire assessing night shift stress, sleep disturbance, and quality of life. Descriptive statistics, correlation analysis, and path analysis were conducted to analyze the data. Findings from this study revealed that the disruption of the circadian rhythm caused by working at night leads to physiological disturbances resulting in fatigue and long-term implication, such as the development of chronic diseases.

A study by Qanash et al., (2021) in a study impact of night shifts on sleeping patterns, psychosocial and physical well-being among healthcare professionals: a cross-sectional study in a tertiary hospital in Saudi Arabia. An observational crosssectional study from July to September 2019 at King Abdulaziz Medical City, Jeddah, Saudi Arabia was performed, convenience sampling technique was used to recruit 352 healthcare providers to participate in the study. The outcomes measured included the effect of working hours of healthcare workers on psychosocial and physical health, substance use, and sleep quality and patterns. Pearson's $\chi 2$ test was used to compare proportions, and Student's t-test/Analysis of variance (ANOVA) was used to examine the mean differences among different demographic groups. Results from this study showed that 71% of night shift workers reported having poor-quality sleep compared with 50% of day shift workers ($p=0.001$).

Karhula et al., (2020) in a study Permanent night workers´ sleep and psycho-social factors in hospital work. This study was carried out ro determine permanent night workers sleep and psycho-social factors. The participants were 9 312, 92% females, average age 45 years, most commonly nurses and departmental secretaries and

permanent night workers were 154. The Finnish Public Sector survey responses from six hospital districts from 2012 were combined to payroll data from 91 days preceding the survey. The data were analyzed using Pearson $\chi 2$-test, one-way ANOVA and multinomial logistic regression analysis. The permanent night workers of the hospitals reported having difficulties in maintaining sleep ($p < 0.001$), difficulties to fall asleep and fatigue during free-time (p-values <0.001). all which had negative effect on their physiological health.

Futhermore, Alreshdi et al., (2023), in a study the correlation between night shift work schedules, sleep quality, and depression symptoms. A total of 191 participants (55.5% men, 44.5% women) participated and the response rate was 63.6%. The hospital anxiety and depression scale (HADS) and Pittsburgh Sleep Quality Index (PSQI) were used to assess depression score and sleep quality, respectively. Findings from this study showed that Nurses who worked night shifts had substantially higher PSQI ratings ($p<0.05$) than those who worked day shifts and poor sleep due to night shift work had negative effects on the physical health nurses.

2.4.2. Perceived Effects of Night shift on Nurses' Psychological Health

Dires et al (2023) in a study assessment of night-shift effects on nurses' health and work performance at south gondar zone public hospitals. A cross-sectional study design was conducted at four hospitals, which are Debre Tabor Comprehensive Specialized Hospital, Addis Zemen Primary Hospital, Mekane Eyesus Primary Hospital, and Nifas Meucha Primary Hospital. A structured self-administered questionnaire was used to collect the data from 1st December 2021 to 1st February 2022. Data were entered into *Epi* data version 4.2 and then exported to SPSS version 24 for analysis; data were summarized by using percentages and frequencies and the association between demographic factors and feelings of nurses about night shift work

was assessed by using a bivariate and multivariable logistic regression model. Results from this study revealed that night shift affects 160 (65.6 %) nurses psychological health and work performance. Therefore, revealing that more than half of nurses psychological health in this facility were affected by night shift.

Another study by Alsharari (2020), on the psychological and social effects of night shift work and the associated factors among nurses in Saudi Arabia (SA). A cross-sectional, descriptive survey was carried out from May to July 2017 among nurses working night shifts in public hospitals in all regions of SA. The data were collected through online or paper-based self-administered questionnaires and a total of 1521 nurses completed the survey. Multivariable logistic regression analysis was utilized to identify the predictors of experiencing the psychological and social impact of night shift work. Findings from this study showed that a total of 88.2% (1341/1521) of the participants which was majority of the nurses reported a psychological impact due to night shift work.

Also, a study by Books et al., (2020), on Night Shift Work and Its Health Effects on Nurses. A quantitative study using descriptive design; it also incorporated three qualitative open-ended questions to complement the study. The data were collected using Survey Monkey, with an Internet based confidential data collection tool. The population of relevance to this study was nurses employed in hospital settings in the United States. Results indicated that night shift has a psychological effect on nurses mood as it leads to mood changes because of working the night shift.

Al-Hrinat et al., (2024) in a study the impact of night shift stress and sleep disturbance on nurses quality of life: case in Palestine Red Crescent and Al-Ahli Hospital, a cross-sectional study aimed to investigate the impact of night shift stress and sleep disturbance on the quality of life among nurses working in Palestine Red Crescent

Society and Al-Ahli Hospital. Convenience sampling was used to recruit 189 full-time registered nurses with at least one year of job experience. The participants completed a questionnaire assessing night shift stress, sleep disturbance, and quality of life. Descriptive statistics, correlation analysis, and path analysis were conducted to analyze the data. Findings from this study revealed that working at night could leads to psychological disturbances among nurses, resulting reduced job satisfaction, and increased stress levels among nurses. These stressors could lead to development of mood disorders.

Amiard et al., (2022) in study Health, occupational stress, and psychosocial risk factors in night shift psychiatric nurses: the influence of an unscheduled night-time nap. A comparative descriptive study of two groups of nurses who filled out a questionnaire on health and occupational stress was performed among nurses working permanently on the night shift (the night shift group, who took unscheduled naps), and nurses rotating weekly between morning and afternoon shifts (the day shift group); where the night and day shift groups comprised 53 and 30 nurses, respectively. Findings from this study revealed that in the day shift group, a low level of support from supervisors was associated with elevated levels of distress, anxiety, and gastrointestinal disorders, while the night shift group experienced a greater overall work load which was associated with elevated levels of anxiety and distress. These findings indicated that the nurses on the night shift had adapted well to their working conditions.

Alreshidi et al., (2023), in a study the correlation between night shift work schedules, sleep quality, and depression symptoms. A total of 191 participants (55.5% men, 44.5% women) participated and the response rate was 63.6%. The hospital anxiety and depression scale (HADS) and Pittsburgh Sleep Quality Index (PSQI) were used to

assess depression score and sleep quality, respectively. Findings from this study showed that Nurses who worked night shifts suffered depressive symptoms which are negative effects of night shift work on mental health; they experienced higher rates of depression than those who work day shifts only.

Futhermore, Karhula et al., (2020) in a study Permanent night workers´ sleep and psycho-social factors in hospital work. This study was carried out ro determine permanent night workers sleep and psycho-social factors. The participants were 9 312, 92% females, average age 45 years, most commonly nurses and departmental secretaries and permanent night workers were 154. The Finnish Public Sector survey responses from six hospital districts from 2012 were combined to payroll data from 91 days preceding the survey. The data were analyzed using Pearson $\chi 2$-test, one-way ANOVA and multinomial logistic regression analysis. The permanent night workers of the hospitals reported that they were more often satisfied with autonomy at work and appreciation and fair treatment by colleagues during night shifts; and this had a positive effect on their psychological health.

2.4.3 Perceived Effects of Night shift on Nurses' Social Health

Dires et al (2023) in a study assessment of night-shift effects on nurses' health and work performance at south gondar zone public hospitals. A cross-sectional study design was conducted at four hospitals, which are Debre Tabor Comprehensive Specialized Hospital, Addis Zemen Primary Hospital, Mekane Eyesus Primary Hospital, and Nifas Meucha Primary Hospital. A structured self-administered questionnaire was used to collect the data from 1st December 2021 to 1st February 2022. Data were entered into *Epi* data version 4.2 and then exported to SPSS version 24 for analysis; data were summarized by using percentages and frequencies and the association between demographic factors and feelings of nurses about night shift work

was assessed by using a bivariate and multivariable logistic regression model. Results from this study revealed that night shift work affects the social life of 156 (63.9 %) nurses which was above average of the number of nurses in the hosptali.

Another study by Alsharari (2020), on the psychological and social effects of night shift work and the associated factors among nurses in Saudi Arabia (SA). A cross-sectional, descriptive survey was carried out from May to July 2017 among nurses working night shifts in public hospitals in all regions of SA. The data were collected through online or paper-based self-administered questionnaires and a total of 1521 nurses completed the survey. Multivariable logistic regression analysis was utilized to identify the predictors of experiencing the psychological and social impact of night shift work. Findings from this study showed that a total of 90.9% (1383/1521) which was a lion share of the participants reported a social impact due to night shift work.

Also, a study by Books et al., (2020), on Night Shift Work and Its Health Effects on Nurses. A quantitative study using descriptive design; it also incorporated three qualitative open-ended questions to complement the study. The data were collected using Survey Monkey, with an Internet based confidential data collection tool. The population of relevance to this study was nurses employed in hospital settings in the United States. Results indicated that night shift has a social effect as it causes family stressors on the nurses.

Karhula et al., (2020) in a study Permanent night workers´ sleep and psycho-social factors in hospital work. This study was carried out ro determine permanent night workers sleep and psycho-social factors. The participants were 9 312, 92% females, average age 45 years, most commonly nurses and departmental secretaries and permanent night workers were 154. The Finnish Public Sector survey responses from

six hospital districts from 2012 were combined to payroll data from 91 days preceding the survey. The data were analyzed using Pearson χ2-test, one-way ANOVA and multinomial logistic regression analysis. The permanent night workers of the hospitals reported that they experienced less work-life conflict, which made their social life better than those working day or rotating shifts.

Futhermore, Al-Hrinat et al., (2024) in a study the impact of night shift stress and sleep disturbance on nurses quality of life: case in Palestine Red Crescent and Al-Ahli Hospital, a cross-sectional study aimed to investigate the impact of night shift stress and sleep disturbance on the quality of life among nurses working in Palestine Red Crescent Society and Al-Ahli Hospital. Convenience sampling was used to recruit 189 full-time registered nurses with at least one year of job experience. The participants completed a questionnaire assessing night shift stress, sleep disturbance, and quality of life. Descriptive statistics, correlation analysis, and path analysis were conducted to analyze the data. Findings from this study revealed that night shift work ha negative impact on the social status of nurses due to excessive daytime sleepiness after a night shift.

Additionally, Qanash et al., (2021) in a study impact of night shifts on sleeping patterns, psychosocial and physical well-being among healthcare professionals: a cross-sectional study in a tertiary hospital in Saudi Arabia. An observational crosssectional study from July to September 2019 at King Abdulaziz Medical City, Jeddah, Saudi Arabia was performed, convenience sampling technique was used to recruit 352 healthcare providers to participate in the study. The outcomes measured included the effect of working hours of healthcare workers on psychosocial and physical health, substance use, and sleep quality and patterns. Pearson's χ2 test was used to compare proportions, and Student's t-test/Analysis of variance (ANOVA) was

used to examine the mean differences among different demographic groups. Results from this study showed that the social life of health workers were more adversely affected among night shift workers compared with day shift workers: 3.95 (SD=1.11) and 3.61 (SD=1.25), respectively, $p<0.030$.

2.4.4 Perceived Effect of Night shift on Nurses' Work Performance

Alsharari et al., (2021) in a study Impact of night shift rotations on nursing performance and patient safety. A descriptive predictive correlational design was used to investigate nurses' perceptions. Electronic and printable survey questionnaires were distrusted among nurses working in public hospitals in multiple regions of Saudi Arabia. The study recruited 1,256 nurses from different nationalities, hospital work units and work experience. Result from this study revealed that night shiftwork had effect on 85.7% of nurses work performance.

Dires et al (2023) in another study assessment of night-shift effects on nurses' health and work performance at south gondar zone public hospitals. A cross-sectional study design was conducted at four hospitals, which are Debre Tabor Comprehensive Specialized Hospital, Addis Zemen Primary Hospital, Mekane Eyesus Primary Hospital, and Nifas Meucha Primary Hospital. A structured self-administered questionnaire was used to collect the data from 1st December 2021 to 1st February 2022. Data were entered into *Epi* data version 4.2 and then exported to SPSS version 24 for analysis; data were summarized by using percentages and frequencies and the association between demographic factors and feelings of nurses about night shift work was assessed by using a bivariate and multivariable logistic regression model. Results from this study revealed that night shift work also affects the work performance of nurses by increasing workload 96(39.3 %), tiredness 74 (30.3 %), and by lowering concentration 38(15.6 %).

Also, Al-Hrinat et al., (2024) in a study the impact of night shift stress and sleep disturbance on nurses quality of life: case in Palestine Red Crescent and Al-Ahli Hospital, a cross-sectional study aimed to investigate the impact of night shift stress and sleep disturbance on the quality of life among nurses working in Palestine Red Crescent Society and Al-Ahli Hospital. Convenience sampling was used to recruit 189 full-time registered nurses with at sleast one year of job experience. The participants completed a questionnaire assessing night shift stress, sleep disturbance, and quality of life. Descriptive statistics, correlation analysis, and path analysis were conducted to analyze the data. Findings from this study revealed that night shift had a negative effect on the work performance of nurses, as fatigue and impaired cognitive functioning due to night shift could compromise nurses' ability to provide optimal care, potentially leading to medical errors and compromised patient safety.

Futhermore, Qanash et al., (2021) in a study impact of night shifts on sleeping patterns, psychosocial and physical well-being among healthcare professionals: a cross-sectional study in a tertiary hospital in Saudi Arabia. An observational crosssectional study from July to September 2019 at King Abdulaziz Medical City, Jeddah, Saudi Arabia was performed, convenience sampling technique was used to recruit 352 healthcare providers to participate in the study. The outcomes measured included the effect of working hours of healthcare workers on psychosocial and physical health, substance use, and sleep quality and patterns. Pearson's $\chi 2$ test was used to compare proportions, and Student's t-test/Analysis of variance (ANOVA) was used to examine the mean differences among different demographic groups. Results from this study showed that job performance was higher among day shift workers than night shift workers: the mean scores were 3.82 (SD=0.93) and 3.48 (SD=1.04), respectively, p=0.007.

Karhula et al., (2020) in a study Permanent night workers´ sleep and psycho-social factors in hospital work. This study was carried out ro determine permanent night workers sleep and psycho-social factors. The participants were 9 312, 92% females, average age 45 years, most commonly nurses and departmental secretaries and permanent night workers were 154. The Finnish Public Sector survey responses from six hospital districts from 2012 were combined to payroll data from 91 days preceding the survey. The data were analyzed using Pearson $\chi 2$-test, one-way ANOVA and multinomial logistic regression analysis. The permanent night workers of the hospitals reported that night shifts had a negative effect on their work performance as they experienced more workplace violence; therefore reducing work performance during night shifts

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section described the methods and procedures that were used in this study. It discussed them under the following headings, research design, research setting, population target, sample size and sampling techniques, instrument for data collection, validity/reliability of the instrument, method of data collection, method of data analysis, and ethical consideration.

3.2 Research Design

The research design serves as the foundation framework that delineates the methods and procedures for collecting and analyzing the necessary data in a research study. A descriptive cross-sectional survey research design method was used for this study to evaluate the “perceived effects of night shift on nurses' physical and psycho-social health and work performance in Central Hospital and Faith Mediplex Hospital, Benin City, Edo State".

A quantitative design is a formal objective systemic process in which numerical data are used to obtain information about the word (Burns & Groove, 2009). Descriptive study design was used since the purpose was to gather and analyse data and allow respondents freely express their feelings.

3.3 Research Setting

The research setting, as defined by Koswara (2022) and Trondle et al. (2021), encompasses the physical, social, and cultural environment in which data collection occurs within a study. For this research, the study was carried out in Central Hospital

and Faith Mediplex Hospital, Benin City, Edo State, which are one of the biggest and patronized public health facility in Benin city, Edo state.

Benin Central Hospital

This study was conducted in Benin Central Hospital, a medical facility built by the colonial masters 115 years ago. The hospital, conspicuously located on the Sapele Road, was at inception named Benin General Hospital before it was changed to Specialists Hospital and later Central Hospital in the 1980s. Just like its name, the ownership was transferred from British Government to the Western Governments, Midwest and Edo State government. It was founded in 1980s and has a bed state of 300beds and 20 departments and services. It is a secondary health institution which serves as a referral, healing, diagnostic, teaching and record centre in the government health care delivering system.

The hospital is made up of the major departments of the hospital such as Out-Patient Department (OPD), the wards, Maternity and Gynaecology, Dentistry, Pharmacy, laboratories, Accident and Emergency and so on. The hospital has nurses working in all the wards.

Faith Mediplex Hospital

Faith Mediplex Hospital is a privately owned healthcare facility situated in the vibrant city of Benin City, Edo State, Nigeria. Established on January 1, 1997, the hospital has been serving the local community and beyond for several years. Operating on a 24-hour basis, Faith Mediplex Hospital offers round-the-clock medical care to cater to patients' needs at any time. As a comprehensive healthcare provider, Faith Mediplex Hospital offers a wide range of medical services and amenities to meet the diverse

healthcare needs of its patients. The hospital's extensive services encompass various medical specialties, making it a versatile and well-rounded medical institution in the region. Medical Specialties and Services offered by Faith Mediplex Hospital include: specialized medical care for infants, children, and adolescents, including neonatal care for newborns, eye care and treatment for various eye conditions and vision-related issues. Orthopedic services for the treatment of musculoskeletal disorders, injuries, and joint-related conditions. Diagnosing and treating disorders of the nervous system, including the brain, spinal cord, and nerves. The hospital also provides comprehensive women's health services, including antenatal care, childbirth, and gynaecological treatments.

3.4 Target Population

The target population were 251 Nurses working night shifts in the wards of Central Hospital(150) and Faith Mediplex Hospital(101) nurses.

NAME OF WARDS	NUMBER OF NURSES
Surgical Ward	25
Medical Ward	22
Accident and Emergency Ward	31
Pediatric & Neonatology Ward	29
Obstetrics & Gynaecology Ward	22
Theatre	21
TOTAL	150

Table 3.1 Benin Central Hospital

Table 3.2 Faith Mediplex Hospital

NAME OF WARDS	NUMBER OF NURSES
Surgical Ward	19
Theatre	13
Accident and Emergency Ward	14
Obstetrics & Gynaecology Ward	15
Medical Ward	13
Pediatric & Neonatology Ward	16
Private Ward	11
TOTAL	101

3.5 Samples Size Determination

The sample size was determined using the Taro Yamane formula 1967

Formula: $n = N/1+N(d)^2$

N= target population (251); d= 0.05

n= sample size

$$n=\frac{251}{1+251(0.05)^2}$$

$$n=\frac{251}{1+251\ (0.0025)}$$

$$n=\frac{251}{1+0.6275}$$

$$n=\frac{251}{1.6275}$$

n= 154.22

n= 154

10% Attrition rate= 154×10%

= 15.4

= 15

Therefore, the minimum sample size = 154+15

= 169

Sample size Central= 150/251 ×169= 101

Sample size of Faith Mediplex= 101/251 ×169= 68

3.6 Sampling Technique

Convenience sampling technique was employed to recruit participants for the study. In convenience sampling strategy, researchers choose the cases to be included in the sample on the basis of availability to partake in the study. The researcher focused on sampling nurses who worked night shifts in the wards of the hospital and able to give a written consent to participate in the study.

The inclusion criteria included being available at the time of administering the questionnaire, willingness to participate and consenting to the study verbally.

3.7 Instrument for Data Collection

Copies of questionnaire were used as the research instrument by the researcher. Questions which were carefully drafted, sequenced and constructed in a bid to get in-depth information that were useful and relevant to the study from respondent's understudy, close-ended questions were also used. The questionnaire to be constructed, comprised of 4 sections; section A,B,C, and D.

Section A: Socio demographic,

Section B: Comprised closed-ended questions to access the perceived physical effect of night shift on nurses health

Section C: Comprised closed-ended questions to determine the perceived psychological effect of night shift on nurses health

Section D: Comprised closed-ended questions to determine perceived psychological effect of night shift on nurses health

Section E: comprised close-ended questions to evaluate perceived effect of night shift on nurses work performance.

3.8 Validity of the Instrument

Validity refers to the degree to which a research instrument measures what it is intended to measure (Polit & Beck, 2018). To ensure the validity of the instrument, the questionnaire was structured in relation with the research topic and the project supervisor was consulted to scrutinize the questionnaire. Due corrections were made

before it was distributed. The questionnaire measured what it was supposed to measure and this ensured its face and content validity.

3.9 Reliability of the Instrument

The reliability of a measuring tool can be assessed in various ways. The aspects that have received major attention are stability, internal consistency and equivalence **(**Polit & Beck, 2008). A reliable instrument is one that can produce the same results if the behavior is measured again by the same scale (Colin & Julie, 2006). The reliability of the questionnaire was determined using a pilot study that was conducted giving (10% of the sample size) 17 questionnaires in another hospital namely St. Philomena Hospital to fill and reliability was calculated using Cronbach's Alpha.

3.10 Method of Data Collection

Data was collected by taking permission from the head nurse of the of each ward and questionnaires was shared. The nurses in the ward were inquired for their support in delivering the questionnaires. The two research assistants were trained for the purpose of the study on how to share the questionnaires. The researcher and the research assistants distributed the questionnaires to the nurses during their shifts within a period of one week in order to make sure that all the respondents could be reached. Nurses who worked night shift in the various wards partook in this exercise and were requested to return the questionnaire folded and submitted to the head nurse after filling it appropriately. Measures were taken to ensure the quality of the data that were collected. Detailed explanations about the aims and procedure for the study were also given to the head nurses.

3.11 Method of Data Analysis

The research used descriptive analysis. The researcher used Statistical Package for Social sciences (SPSS) version 25.0 to analyze the data and data to be gathered were organized, analyzed and described to give meaning to the research findings. Brief descriptions of the findings were included in tables to give a much clearer picture of the outcomes and detail meanings to the findings for an easier understanding and interpretation.

3.12 Ethical Consideration

Permission to carry out the study was obtained from the Department of Nursing Science, University of Benin by the researcher. Also, Ethical approval were obtained from both hospitals; the ethics and research committee of Ministry of Health, Edo State and the medical director at Faith Mediplex Hospital. Privacy is one of the most important aspects of human life and thus, privacy was not abused, during the conduct of the research. The code of ethics were aimed at protecting the rights of individuals to be used as subjects of research. These included;

Voluntary participation: Respondents were not forced into participating in the research project.

Privacy: was maintained during the filling of the questionnaires hence no name was requested for.

Avoidance of plagiarism: Other studies used were properly acknowledged.

Maintenance of Confidentiality: The respondents' names were with-held and information given were not divulged out to other people but rather were treated with utmost secrecy, and strictly for academic purpose.

CHAPTER FOUR

RESULTS

Table:4.1 showing the socio-demographic characteristics of the respondent

	FREQUENCY	PERCENTAGES
SEX		
Male	22	**13.02**
Female	147	**89.98**
AGE		
20-30	49	28.99
31-40	52	30.77
41-50	36	21.30
50 and above	32	18.93
MARITAL STATUS		
Married	103	60.95
Widow/Widower	27	15.98
Divorced	39	23.08
EDUCATIONAL QUALIFICATION		
RN	85	50.30
RM	20	11.83
Bachelor Degree	52	30.77
Masters	12	7.10
YEAR OF WORK EXPERIENCE		
<5years	56	33.14
6-10years	48	28.40
11-15	40	23.67
>16years	25	14.79
CADRE OF RESPONDENTS		
Intern Nurse	52	30.77
Nursing officer	24	14.20
Nursing officer 2	28	16.57
Senior Nursing Officer	24	14.20
Principal Nursing Officer	20	11.83
Assisted Chief Nursing officer	11	6.51
Chief Nursing Officer [	10	5.92
ETHNIC GROUP		
Bini	102	60.36
Yoruba	40	23.67
Hausa	6	3.55
Igbo	21	12.43
RELIGION		
Christian	132	78.11

Muslim	30	17.75
Others	7	4.14
HOSPITAL:		
Central	**101**	59.76
Faith Mediplex	**68**	40.24

Table 4.1 shows the socio-demographic characteristics of the respondent. The respondents are predominantly female, with females representing 89.98% (147 out of 169) and males 13.02% (22). The largest age group is 31-40 years (30.77%), followed by 20-30 years (28.99%). The older age groups, 41-50 years and 50 years and above, represent 21.30% and 18.93%, respectively. Married respondents make up 60.95%, divorced individuals are 23.08%, and widowed respondents comprise 15.98%. Half of the respondents (50.30%) hold an RN qualification, and 30.77% possess a bachelor's degree. Nurses with less than 5 years of experience make up the largest group at 33.14%, followed by those with 6-10 years at 28.40%. Intern Nurses represent 30.77% of respondents, while the proportion decreases with higher ranks, with Chief Nursing Officers representing only 5.92%. The Bini ethnic group predominates (60.36%), with Yoruba at 23.67%, and Igbo at 12.43%. Such a demographic distribution suggests the workforce has notable ethnic diversity, though it is primarily Bini. Christianity is the most common religion (78.11%), with Muslims accounting for 17.75% and other religions at 4.14%. Religious diversity may necessitate flexibility in scheduling and accommodations around religious observances. A significant majority (91.12%) of respondents work at Central Hospital, with a smaller portion (8.88%) at Faith Mediplex.

Table 4.2: : Perceived effect of night shift on nurse's physical health

ITEMS	SA	A	D	SD	Mean	SD	Remark
Working night shift affects how active and alert I will be during the day	74(43.8%)	70(41.4%)	14(8.3%)	6(3.6%)	3.34	0.82	Negative
My body's cycle rhythm is usually disturbed from working night shift.	81(47.9%)	64(37.9%)	18(10.7%)	6(3.6%)	3.30	0.80	Negative
Working night shift increases my blood sugar level	93(55.0%)	42(24.9%)	27(16.0%)	2(1.2%)	3.42	0.82	Negative
Working night shift increases my blood pressure	85(50.3%)	63(37.3%)	15(8.9%)	6(3.6%)	3.34	0.79	Negative
Night shift makes me stress eat.	68(40.2%)	69(40.8%)	14(8.3%)	18(10.7%)	3.11	0.95	Negative
I get really fatigued after a series of night shift	57(33.7%)	60(35.5%)	15(8.9%)	37(21.9%)	2.81	1.13	Negative
Working night shift makes me struggle with insomnia	55(32.5%)	67(39.6%)	9(5.3%)	38(22.5%)	2.82	1.12	Negative

A majority of respondents (85.2%) agree that working night shifts affects their daytime alertness, with a mean score of 3.34 (SD = 0.82), indicating moderate consensus and a strong overall agreement. Most nurses (85.8%) agree that night shifts disrupt their body's natural rhythm, reflected in a mean of 3.30 (SD = 0.80), suggesting strong consensus on this negative impact. Approximately 79.9% feel that night shifts raise their blood sugar levels, with a mean score of 3.42 (SD = 0.82). This strong agreement reflects concern over metabolic health changes associated with night shifts. A high percentage of nurses (87.6%) report that night shifts increase their blood pressure, as indicated by a mean of 3.34 (SD = 0.79). This suggests widespread concern about the cardiovascular effects of night work. A notable 81% of nurses

acknowledge that night shifts lead to stress eating, with a mean of 3.11 (SD = 0.95). Although overall agreement is high, the higher SD suggests more variability in individual experiences with stress eating. About 69.2% of respondents report feeling fatigued after several consecutive night shifts, although 21.9% strongly disagree. The mean score of 2.81 (SD = 1.13) indicates variability, suggesting that while many nurses experience fatigue, some may handle the workload better than others. Finally, 72.1% of nurses agree that night shifts lead to insomnia, but 22.5% strongly disagree. With a mean score of 2.82 (SD = 1.12), responses vary, implying that night shift work affects sleep patterns differently across individuals across individuals

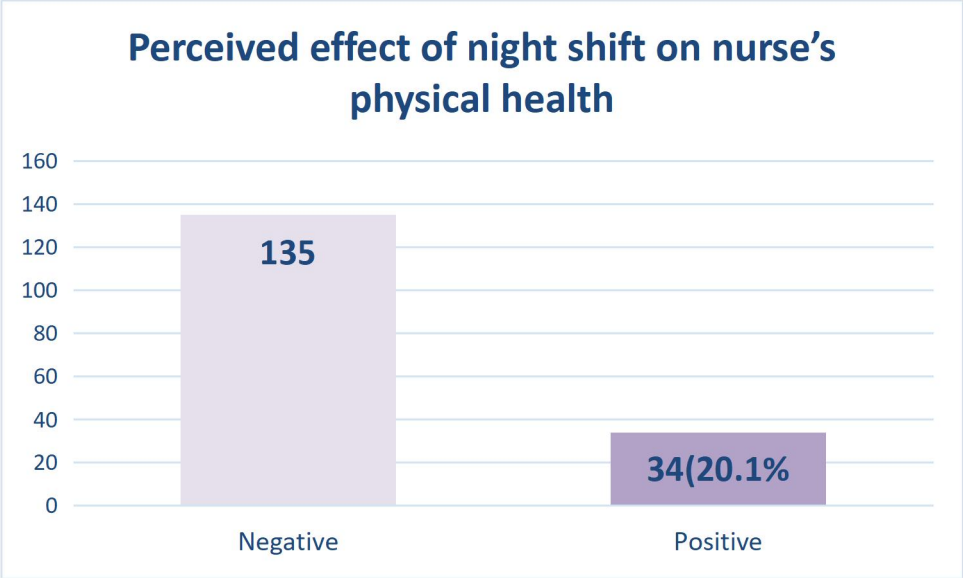

Figure 4.1 Perceived effect of night shift on nurse's physical health.

It shows that 135(79.0%%) agreed that night shift had negative on their physical health while 34(20.1%) agreed that night shift had positive effect on their physical health.

To calculate the summary of the negative percentage scores from the provided data, we focus on the response categories of "Strongly Agree (SA)" and "Agree (A)" for each item. These categories indicate the perceived negative effects of working night shifts. While to calculate the positive percentage score for each item, we look at the "Disagree (D)" and "Strongly Disagree (SD)" responses. These categories indicate a lesser or no negative effect perceived by the respondents.

Table 4.3: Perceived effect of night shift on nurses' psychological health.

ITEMS	SA	A	D	SD	Mean	SD	Remark
Working night shifts affects my attitude positively.	29(17.2%)	88(52.1%)	28(16.6)	24(14.2%)	2.72	0.91	Negative
I maintain good behaviour more when working during night shift	71(42.0%)	52(30.8%)	23(13.6%)	23(13.6%)	3.01	1.05	Negative
I am more satisfied when working my night work schedule	40(23.7%)	87(51.5%)	22(13.0%)	20(11.8%)	2.87	.910	Negative
working night shift makes me feel depressed	70(41.4%)	58(34.3%)	11(6.5%)	30(17.8%)	2.99	1.09	Negative
I feel isolated when working night shifts	64(37.9%)	64(37.9%)	15(8.9%)	24(14.2%)	3.01	1.03	Negative
I am more mentally prepared to make decisions when working night shifts	46(27.2%)	73(43.2%)	26(15.4%)	24(14.2%)	2.83	.99	Negative
Night shift nurses do not get enough recognition and appreciation compared to nurses who work only day shifts, so this makes them feel less.	68(40.2%)	56(33.1%)	10(5.9%)	30(17.8%)	3.05	1.14	Negative

The statement, "Working night shifts affects my attitude positively," 17.2% of nurses strongly agreeing, 52.1% agreeing, 16.6% disagreeing, and 14.2% strongly disagreeing. With a mean of 2.72 and a standard deviation of 0.91, responses suggest that while a majority perceives a positive effect on attitude (69.3%), the average score implies a more neutral or slightly positive view. For the statement, "I maintain good behavior more when working during night shift," responses show 42.0% strongly agree, 30.8% agree, 13.6% disagree, and 13.6% strongly disagree. The mean score of 3.01 with a standard deviation of 1.05 suggests that a significant proportion (72.8%)

believes they maintain better behavior on night shifts, showing a moderate level of agreement. In response to "I am more satisfied when working my night work schedule," 23.7% strongly agreed, 51.5% agreed, 13.0% disagreed, and 11.8% strongly disagreed. The mean is 2.87, with a standard deviation of 0.91, indicating general satisfaction among nurses (75.2%) with the night shift, though the level of satisfaction is moderate. The statement, "Working night shift makes me feel depressed," had 41.4% strongly agreeing, 34.3% agreeing, 6.5% disagreeing, and 17.8% strongly disagreeing. With a mean score of 2.99 and a standard deviation of 1.09, the responses indicate that a significant portion (75.7%) experiences feelings of depression, reflecting a common negative psychological impact. For "I feel isolated when working night shifts," responses were 37.9% strongly agree, 37.9% agree, 8.9% disagree, and 14.2% strongly disagree. The mean score is 3.01, with a standard deviation of 1.03, suggesting that feelings of isolation are prevalent, as 75.8% report experiencing this sentiment. Regarding the statement, "I am more mentally prepared to make decisions when working night shifts," 27.2% strongly agree, 43.2% agree, 15.4% disagree, and 14.2% strongly disagree. The mean score of 2.83 with a standard deviation of 0.99 implies that a majority (70.4%) feel prepared to make decisions on night shifts, although the level of confidence is moderate. The statement, "Night shift nurses do not get enough recognition and appreciation compared to nurses who work only day shifts, so this makes them feel less," saw 40.2% strongly agreeing, 33.1% agreeing, 5.9% disagreeing, and 17.8% strongly disagreeing. With a mean score of 3.05 and a standard deviation of 1.14, the responses highlight a strong sense of inadequate recognition among night-shift nurses, as 73.3% report feeling undervalued.

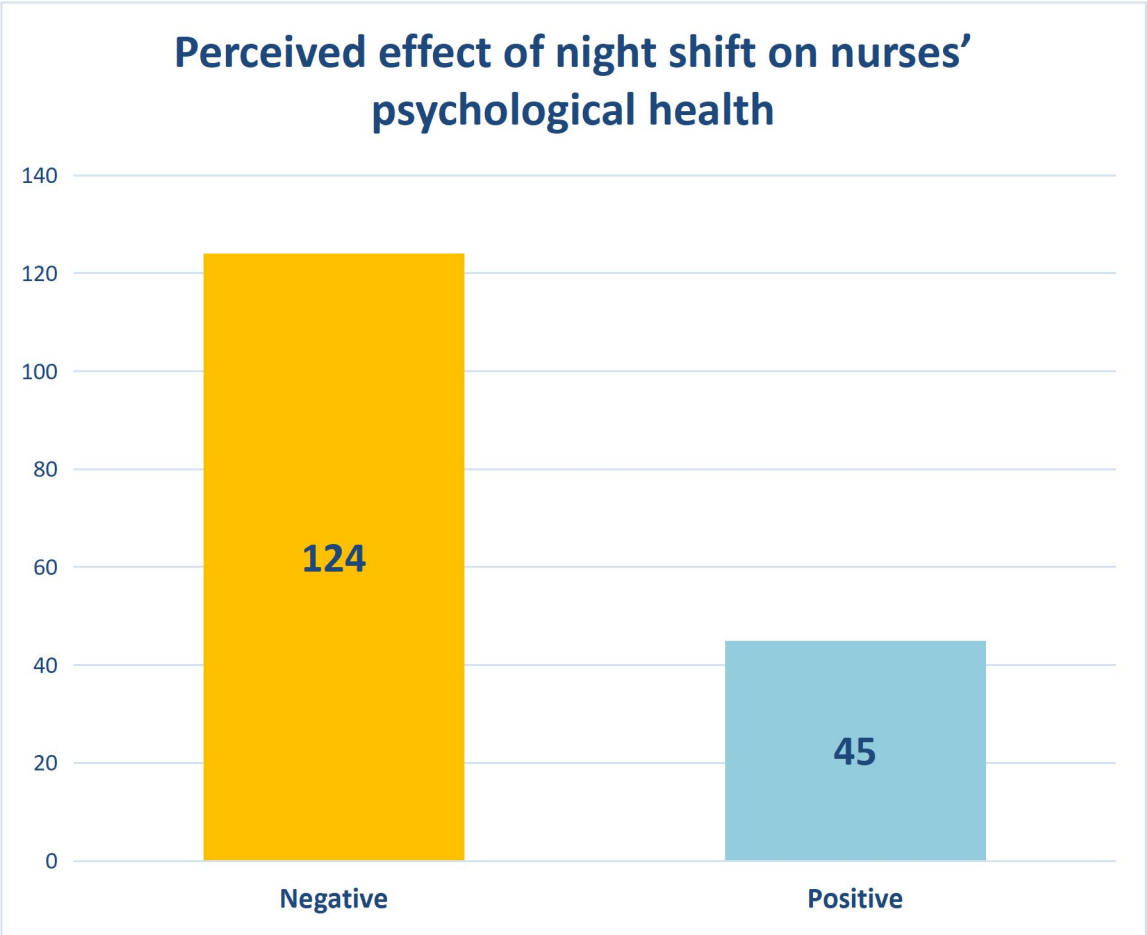

Figure 4.2 Perceived effect of night shift on nurse's psychological health.

It shows that 124(73.4%%) agreed that night shift had negative on their psychological health, while 45(26.6%) agreed that night shift had positive effect on their psychological health.

To calculate the summary of the negative percentage scores from the provided data, we focus on the response categories of "Strongly Agree (SA)" and "Agree (A)" for each item. These categories indicate the perceived negative effects of working night shifts. While to calculate the positive percentage score for each item, we look at the "Disagree (D)" and "Strongly Disagree (SD)" responses. These categories indicate a lesser or no negative effect perceived by the respondents.

Table 4.4. Perceived effect of night shift on nurses' social health

ITEMS	SA	A	D	SD	Mean	SD	RMK
Working night shift gives me time for my other daily activities	46(27.2%)	88(52.1%)	23(13.6%)	12(7.1%)	2.99	0.83	Negative
I am able to maintain a good social relationship with my family when working night shift	51(30.2%)	80(47.3%)	26(15.4%)	12(7.1%)	3.01	0.86	Negative
Working night shifts gives me enough free time to hang out with friends	55(32.5%)	72(42.6%)	26(15.4%)	16(9.5%)	2.98	0.99	Negative
My family understands my tight schedule and supports me	64(37.9%)	45(26.6%)	36(21.3%)	24(14.2%)	2.88	1.07	Negative
I can manage my home and attend to my family needs when working night	51(30.2%)	63(37.3%)	33(19.5%)	22(13.0%)	2.85	1.00	Negative
Home to work transportation is easier when working night shifts	66(39.1%)	72(42.6%)	14(8.3%)	15(8.9%)	3.13	0.91	Negative
Working night shifts gives me time to go to the gym.	58(34.3%)	79(46.7%)	14(8.3%)	16(9.4%)	3.09	.92	Negative

For the statement, "Working night shift gives me time for my other daily activities," 27.2% of nurses strongly agreed, 52.1% agreed, 13.6% disagreed, and 7.1% strongly disagreed. With a mean of 2.99 and a standard deviation of 0.83, most nurses (79.3%) feel that night shifts allow them to engage in other daily activities, with the mean indicating a moderately positive perception. In response to "I am able to maintain a good social relationship with my family when working night shift," 30.2% strongly agreed, 47.3% agreed, 15.4% disagreed, and 7.1% strongly disagreed. The mean of 3.01 and standard deviation of 0.86 suggest that a significant portion (77.5%) feels they can maintain family relationships while working night shifts, reflecting a generally positive perception. For "Working night shifts gives me enough free time to hang out with friends," responses show 32.5% strongly agree, 42.6% agree, 15.4% disagree, and 9.5% strongly disagree. The mean is 2.98, with a standard deviation of 0.93, indicating that most nurses (75.1%) believe night shifts provide time for socializing with friends, though the overall sentiment is moderately positive. Regarding "My family understands my tight schedule and supports me," 37.9% strongly agreed, 26.6% agreed, 21.3% disagreed, and 14.2% strongly disagreed. With a mean of 2.88 and a standard deviation of 1.07, responses indicate a relatively positive perception, though with a lower percentage of agreement (64.5%) and slightly more mixed feelings. The statement "I can manage my home and attend to my family needs when working night" received 30.2% strongly agree, 37.3% agree, 19.5% disagree, and 13.0% strongly disagree. With a mean of 2.85 and standard deviation of 1.00, the responses are slightly less positive, with 67.5% feeling they can manage family needs, indicating moderate confidence in balancing home responsibilities. For "Home to work transportation is easier when working night shifts," 39.1% strongly agreed, 42.6% agreed, 8.3% disagreed, and 8.9% strongly

disagreed. The mean of 3.13 and standard deviation of 0.91 suggest that transportation ease is perceived positively, with 81.7% in agreement, the highest level of agreement among the items. In response to "Working night shifts gives me time to go to the gym," 34.3% strongly agreed, 46.7% agreed, 8.3% disagreed, and 9.4% strongly disagreed. The mean of 3.09 and standard deviation of 0.92 indicate that a high percentage (81%) feel night shifts allow time for exercise, reflecting a positive perception.

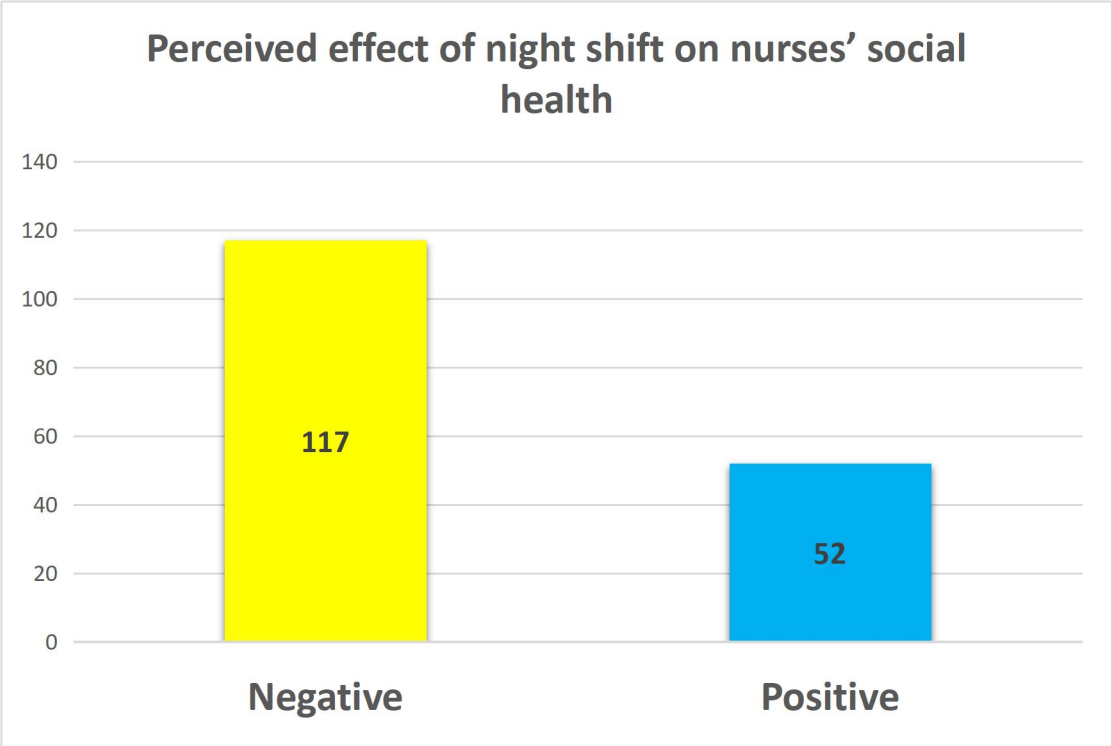

Figure 4.3 Perceived effect of night shift on nurses' social health

It shows that 117(69.2%%) agreed that night shift had negative on their social health, while 52(30.8%) agreed that night shift had positive effect on their social health.

To calculate the summary of the negative percentage scores from the provided data, we focus on the response categories of "Strongly Agree (SA)" and "Agree (A)" for each item. These categories indicate the perceived negative effects of working night shifts. While to calculate the positive percentage score for each item, we look at the "Disagree (D)" and "Strongly Disagree (SD)" responses. These categories indicate a lesser or no negative effect perceived by the respondents.

Table 4.5: Perceived effect of night shift on nurses' work performance.

ITEMS	SA	A	D	SD	Mean	SD	RMK
Working night shift increases my level of concentration.	66(39.1%)	68(40.2%)	20(11.8%)	14(8.3%)	3.12	0.92	Negative
Working night shift gives room to making more medication errors than in the day.	68(40.2%)	74(43.8%)	18(10.9%)	9(5.3%)	3.19	0.83	Negative
Night shift work is less likely to be interrupted unlike during day shifts where the hospital is busy with attending to outpatient and inpatients	58(34.3%)	80(47.3%)	22(13.0%)	9(5.3%)	3.11	0.82	Negative
Patients cooperate more at night shift which makes my work easier to carry out	61(36.1%)	70(41.4%)	19(11.2%)	15(8.9%)	3.12	0.96	Negative
There are enough staff at night shift, and this makes the work easier.	64(37.9%)	67(39.6%)	26(15.4%)	12(7.1%)	3.08	0.90	Negative
I feel safer working night shift, therefore increasing my work performance	59(34.9%)	74(43.8%)	21(12.4%)	15(8.9%)	3.05	0.92	Negative
I am more focused during night shift due to the quietness that comes with the night.	59(34.9%)	75(44.4%)	25(14.8%)	10(5.9%)	3.08	0.86	Negative

Table 4.5 shows the Perceived effect of night shift on nurses' work performanc**e.** For "Working night shift increases my level of concentration," 39.1% strongly agreed, 40.2% agreed, 11.8% disagreed, and 8.3% strongly disagreed. With a mean of 3.12 and standard deviation of 0.92, most nurses (79.3%) perceive that night shifts enhance

their concentration, indicating a generally positive effect on focus. In response to "Working night shift gives room to making more medication errors than in the day," 40.2% strongly agreed, 43.8% agreed, 10.9% disagreed, and 5.3% strongly disagreed. The mean of 3.19 with a standard deviation of 0.83 suggests that 84% of nurses perceive a higher likelihood of medication errors during night shifts, indicating a notable risk associated with performance at night. For "Night shift work is less likely to be interrupted unlike during day shifts where the hospital is busy with attending to outpatient and inpatients," 34.3% strongly agreed, 47.3% agreed, 13.0% disagreed, and 5.3% strongly disagreed. The mean of 3.11 and standard deviation of 0.82 show that 81.6% of nurses feel fewer interruptions occur during night shifts, a positive factor for uninterrupted work. When asked if "Patients cooperate more at night shift which makes my work easier to carry out," 36.1% strongly agreed, 41.4% agreed, 11.2% disagreed, and 8.9% strongly disagreed. The mean of 3.12 with a standard deviation of 0.96 reflects that 77.5% perceive higher patient cooperation at night, enhancing ease of work. In response to "There are enough staff at night shift, and this makes the work easier," 37.9% strongly agreed, 39.6% agreed, 15.4% disagreed, and 7.1% strongly disagreed. With a mean of 3.08 and standard deviation of 0.90, this item shows that 77.5% of nurses feel adequately staffed, contributing positively to their workload management. For "I feel safer working night shift, therefore increasing my work performance," 34.9% strongly agreed, 43.8% agreed, 12.4% disagreed, and 8.9% strongly disagreed. The mean is 3.05 with a standard deviation of 0.92, indicating that 78.7% feel safer during night shifts, which they believe boosts performance. Regarding "I am more focused during night shift due to the quietness that comes with the night," 34.9% strongly agreed, 44.4% agreed, 14.8% disagreed,

and 5.9% strongly disagreed. The mean is 3.08 with a standard deviation of 0.86, showing that 79.3% attribute enhanced focus to the night's quiet environment.

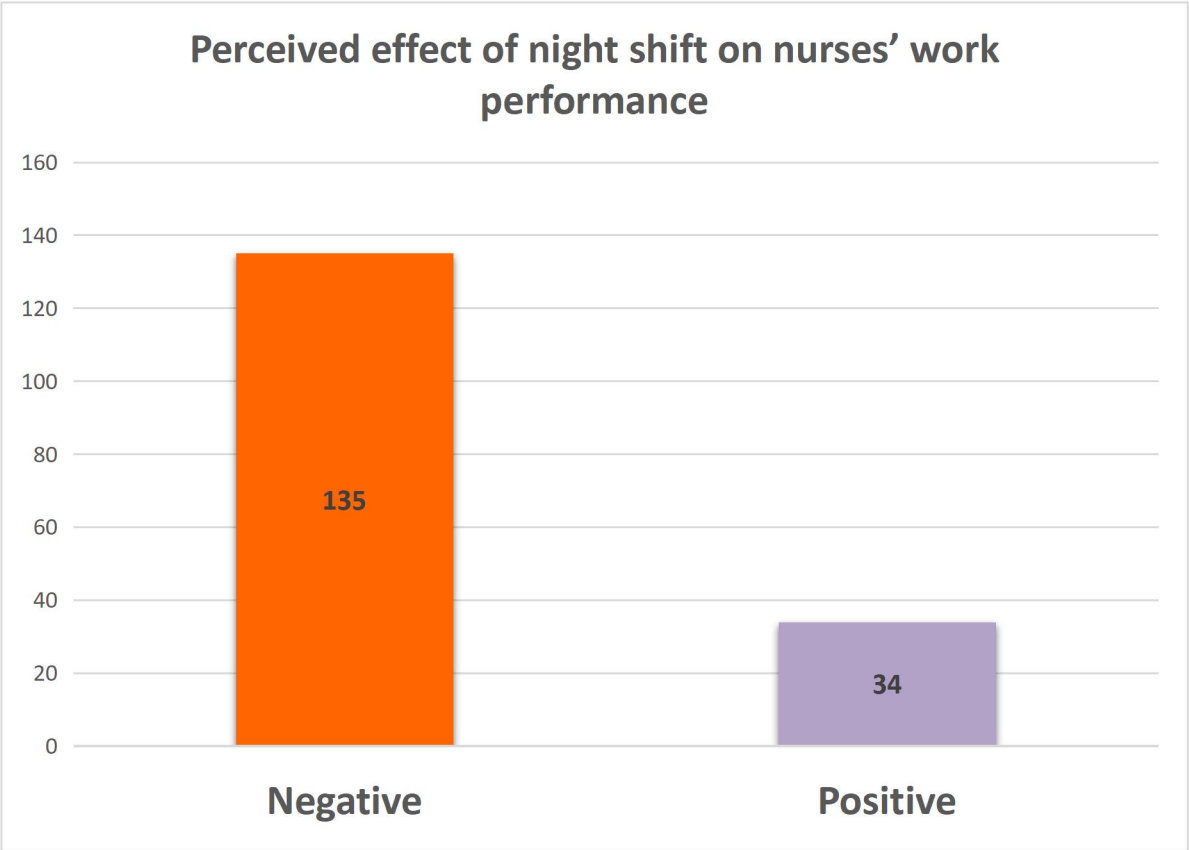

Figure 4.3 Perceived effect of night shift on nurses' work performance.

It shows that 135(79.9%%) agreed that night shift had negative on their work performance., while 34(20.1%) agreed that night shift had positive effect on their work performance

To calculate the summary of the negative percentage scores from the provided data, we focus on the response categories of "Strongly Agree (SA)" and "Agree (A)" for each item. These categories indicate the perceived negative effects of working night shifts. While to calculate the positive percentage score for each item, we look at the "Disagree (D)" and "Strongly Disagree (SD)" responses. These categories indicate a lesser or no negative effect perceived by the respondents.

Hypothesis testing

Hypothesis one: There is no significant association between the perceived effects of night shift on Nurses' physical health and their sociodemographic characteristics.

Table 4.6: Multivariate logistic regression of association between the socio-demographic factors and effects of night shift on Nurses' physical health

ITEMS	P	OR	95% Cl for Or
SEX	0.036	0.157	1.09-3.80
Male	0.054	5.520	0.13-2.54
Female			
AGE	0.227	7.627	1.25-2.621
20-30	0.685	3.219	9.16-2.730
31-40	0.117	1.394	4.13-4.835
41-50		0.780	30-14.143
50 and above			
MARITAL STATUS			
Married	0.003	0.810	3.1-6.179
Widow/Widower	0.287	8.268	7.74-8.71
Divorced	0.129	1.187	0.64-29.23
EDUCATIONAL QUALIFICATION			
RN	0.243	2.339	1.31-4.177
RM	0.512	5.703	2.92-2.332
Bachelor Degree	0.147	1.986	1.74-7.609
Masters	0.012	0.17	3.657-94.672
YEAR OF WORK EXPERIENCE			
<5years	0.022	6.985	4.74-3.534
6-10years	0.075	1.820	0.31-7.179
11-15	0.001	0.026	4.74-9.520
>16years	0.038	0.286	0.31-3.176
CADRE OF RESPONDENTS			
Intern Nurse	0.062	1.968	1.75-2.556
Nursing officer	0.147	2.832	7.32-3.132
Nursing officer 2	0.122	1.872	2.93-12.32
Senior Nursing Officer	0.080	2.098	0.77-8.549
Principal Nursing Officer	0.592	0.254	2.20-5.219
Assisted Chief Nursing officer	0.134	0.154	8.33-2.130
Chief Nursing Officer [		0.387	10.251-3.9
ETHNIC GROUP			
Bini		1.654	2.34-8.388
Yoruba	0.092	1.202	5.323-3.24
Hausa		0.307	2.315-14.4
Igbo		0.09	202-3.414
RELIGION			

Christian	0.023	0.32	3.034-3.177
Muslim	0.102	4.791	2.35-18.392
Others	0.653	0.981	3.092-92.60
HOSPITAL:			
Central	0.232	7.94	0.032-5.107
Faith Mediplex	0.053	0.19	4.237-0.535

OR: Odds ratio. CI: Confidence interval.

Table 4.6 shows the Multivariate Logistic Regression Analysis on the Association between Sociodemographic Factors and Perceived Effects of Night Shift on Nurses' Physical Health

This table analyzes the association between nurses' sociodemographic characteristics and the effects of night shift work on their physical health, with emphasis on the Odds Ratio (OR), Confidence Interval (CI), and p-values for each factor.

Sex, Significant: p = 0.036, OR = 0.157, 95% CI = 1.09–3.80. This suggests a significant association between sex and perceived physical effects of night shifts. Males have a slightly higher odds ratio (5.520), though it is not statistically significant (p = 0.054), while females serve as the reference group. While age has a general OR of 7.627 (p = 0.227), none of the specific age groups show a statistically significant association, indicating that age may not be a strong independent predictor of perceived physical health effects from night shifts. Married nurses show a significant association with night shift effects on physical health (p = 0.003, OR = 0.810, CI = 3.1–6.179). Other marital statuses such as widowed and divorced did not show significant associations, though widows/widowers have a higher OR (8.268, p = 0.287). Nurses with a Master’s degree have a notable association with physical health effects (p = 0.012, OR = 0.17, CI = 3.657–94.672). Other qualifications did not have significant associations, though Registered Nurses (RN) and those with a Bachelor's degree had higher ORs (2.339 and 1.986, respectively). Nurses with less than 5 years of experience (p = 0.022, OR = 6.985, CI = 4.74–3.534) and those with 11–15 years

(p = 0.001, OR = 0.026, CI = 4.74–9.520) show significant associations. Nurses with more than 16 years of experience also showed a significant association (p = 0.038, OR = 0.286). No specific cadre showed a statistically significant association with the physical health effects of night shifts. However, nursing officers and senior nursing officers exhibited higher odds ratios, suggesting potential influence though not statistically confirmed. While no ethnic groups showed statistically significant associations, the odds ratios for groups like Bini and Hausa are higher, suggesting possible trends in perception. Significant: Christians have a significant association with perceived night shift effects (p = 0.023, OR = 0.32). Muslim nurses also show higher odds (OR = 4.791), though not statistically significant (p = 0.102). Faith Mediplex has a borderline association with night shift effects (p = 0.053, OR = 0.19), indicating potential differences in perceived effects based on hospital of employment. The analysis reveals that certain sociodemographic factors, such as sex, marital status, educational qualification, years of work experience, and religion (specifically Christianity), significantly correlate with perceived physical health effects of night shifts among nurses. Other factors, like age and ethnic group, showed no significant association but could influence perceptions based on the odds ratios observed.

Hypothesis two: There is no significant association between the perceived effects of night shift on Nurses 'psychological health and their sociodemographic characteristics

Table 4.7: Multivariate logistic regression of association between the socio-demographic factors and effects of night shift on Nurses 'psychological health

ITEMS	P	OR	95% Cl for Or
SEX	0.326	0.00	0.000-1000
Male	0.851	2.31	0.074-8.599
Female			
AGE	0.001	0.466	0.000-0.114
20-30	0.476	4.06	0.108-2.822
31-40	0.191	0.423	0.117-1.535
41-50	0.237	0,553	0.132-1.651
50 and above			
MARITAL STATUS			
Married	0.035	4.32	0.11-0.92
Widow/Widower	0.574	0.69	2.05-9.10
Divorced	0.977	0.04	0.12-9.14
EDUCATIONAL QUALIFICATION			
RN	0.003	1.20	2.57-89.93
RM	0.038	0.21	1.11-34.90
Bachelor Degree	0.695	5.50	0.20-11.23
Masters	0.851	0.31	0.074-8.599
YEAR OF WORK EXPERIENCE			
<5years	0.336	3.573	0.27-47.74
6-10years	0.006	0.010	0.00-0.27
11-15	0.072	0.075	0.00-1.26
>16years	0.070	0.068	0.00-1.24
CADRE OF RESPONDENTS			
Intern Nurse	0.011	4.16	0.04-0.66
Nursing officer	0.879	0.90	0.23-3.54
Nursing officer 2	0.011	4.16	0.04-0.66
Senior Nursing Officer	0.041	1.19	1.06-16.57
Principal Nursing Officer	0.811	1.19	0.28-5.07
Assisted Chief Nursing officer	0.000	4.64	8.54-203.16
Chief Nursing Officer [		0.387	10.251-3.9
ETHNIC GROUP			
Bini	0.078	0.15	0.02-1.23
Yoruba	0.646	5.55	0.24-9.91

Hausa		1.00	
Igbo		0.09	202-3.414
RELIGION			
Christian	0.011	4.16	0.04-0.66
Muslim	0.879	0.90	0.23-3.54
Others	0.208	2.81	0.56-14.06
HOSPITAL:			
Central	0.594	5.78	0.10-3.83
Faith Mediplex	0.974	1.04	0.12-9.14

OR: Odds ratio. CI: Confidence interval.

Table 4.7 shows the Multivariate Logistic Regression Analysis on the Association between Sociodemographic Factors and Perceived Effects of Night Shift on Nurses' Psychological Health. This table examines how different sociodemographic factors relate to perceived psychological health effects from night shifts among nurses. We look at p-values, Odds Ratios (OR), and Confidence Intervals (CI) to identify significant associations.

Sex not statistically significant for association with perceived psychological health effects (p = 0.326). Males had an OR of 2.31, but this was not significant (p = 0.851). Overall p-value for age = 0.001, suggesting a significant association with psychological health. No specific age group shows significance individually, though age 31-40 has a relatively lower OR (0.423), indicating a trend where this age range may perceive less psychological impact. Married nurses show a significant association with psychological health effects (p = 0.035, OR = 4.32, CI = 0.11–0.92). Widow/Widower and Divorced categories are not significant, although the widow/widower category has a high OR (0.69). Both RN (Registered Nurse) (p = 0.003, OR = 1.20) and RM (Registered Midwife) (p = 0.038, OR = 0.21) qualifications show significant associations. Bachelor's and Master's degrees do not show significant associations. Nurses with 6-10 years of experience have a strong association (p = 0.006, OR = 0.010). Those with 11-15 years (p = 0.072) and over 16

years ($p = 0.070$) are not statistically significant but show an OR trend toward less perceived psychological impact. Significant: Intern Nurse and Nursing Officer 2 show significant associations ($p = 0.011$, OR = 4.16 for both), as well as Senior Nursing Officer ($p = 0.041$, OR = 1.19). Assistant Chief Nursing Officer has a very high OR (4.64) and is highly significant ($p < 0.001$), suggesting a strong association. Bini shows a trend towards significance ($p = 0.078$, OR = 0.15), suggesting a possible association, though not statistically confirmed. Christianity has a significant association ($p = 0.011$, OR = 4.16). Other religions did not show significant associations. Neither hospital affiliation showed significant associations, though Central Hospital has a higher OR (5.78), indicating a possible trend. The analysis highlights significant associations between the perceived psychological health effects of night shifts and age, marital status (specifically married), educational qualification (RN and RM), years of work experience (6–10 years), certain cadres (especially Assistant Chief Nursing Officer), and religion (Christianity). These results suggest that these sociodemographic factors may influence how nurses perceive the psychological impacts of night shifts.

Hypothesis three: There is no significant association between the perceived effects of night shift on Nurses' social health and their sociodemographic characteristics

Table 4.8: Multivariate logistic regression of association between the socio-demographic factors and effects of night shift on Nurses' social health

ITEMS	P	OR	95% Cl for Or
SEX	0.116	1.415	2.50-32.98
Male	0.267	5.299	0.56-4.19
Female			
AGE	0.876	1.25	0.694-3.484
20-30	0.954	5.12	0.704-9.209
31-40	0.1010	4.85	0.843-2.159
41-50	0.286	2.33	0.15-3.75
50 and above			
MARITAL STATUS			
Married	0.300	0.02	5.664-49.973
Widow/Widower	0.476	6.50	3.594-6.484
Divorced	0.954	2.32	5.304-4.209
EDUCATIONAL QUALIFICATION			
RN	0.877	7.01	0.13-7.15
RM	0.294	0.60	1.10-3.85
Bachelor Degree	0.174	1.66	3.05-9.10
Masters	0.312	1.36	1.07-1.83
YEAR OF WORK EXPERIENCE			
<5years	0.100	2.04	0.664-49.473
6-10years	0.000	4.97	3.330-46.82
11-15	0.021	1.71	2.118-155
>16years	0.051	0.072	1.01-1.44
CADRE OF RESPONDENTS			
Intern Nurse	0.376	1.89	0.494-6.484
Nursing officer	0.854	1.31	0.304-4.209
Nursing officer 2	0.0010	9.86	0.343-2.159
Senior Nursing Officer	0.186	0.32	0.05-1.75
Principal Nursing Officer	0.006	0.010	0.00-0.27
Assisted Chief Nursing officer	0.000	4.64	8.54-203.16
Chief Nursing Officer [		0.387	10.251-3.9
ETHNIC GROUP			
Bini	0.000	3.95	3.330-46.882
Yoruba	0.000	0.23	2.664-49.673
Hausa		3.543	

Igbo		0.001	202-3.414
RELIGION			
Christian	0.023	7.18	1.04-1.60
Muslim	0.292	1.99	0.23-3.57
Others	0.109	0.81	2.56-2.06
HOSPITAL:			
Central	0.594	5.78	0.10-3.83
Faith Mediplex	0.453	0.24	2.761-49.874

OR: Odds ratio. CI: Confidence interval.

Table 4.8 shows the Multivariate Logistic Regression Analysis on the Association between Sociodemographic Factors and Perceived Effects of Night Shift on Nurses' Social Health. This table explores the association between sociodemographic factors and the perceived effects of night shift on nurses' social health, based on p-values, Odds Ratios (OR), and Confidence Intervals (CI).

Sex not statistically significant for association with perceived social health effects ($p = 0.116$). Males show an OR of 5.299, but this association is also not significant ($p = 0.267$). Age is not significantly associated with perceived social health effects ($p = 0.876$). None of the individual age groups show significant associations, although those aged 31-40 have a slightly higher OR (4.85), indicating a trend toward possible association. Marital Status not statistically significant overall for association ($p = 0.300$ for married). Widow/Widower has a high OR (6.50) but is not statistically significant ($p = 0.476$). No significant associations found with social health, though RN has a high OR of 7.01 ($p = 0.877$), indicating a potential trend that may warrant further investigation. Nurses with 6-10 years of experience show a strong association with perceived social health effects ($p < 0.001$, OR = 4.97). Nurses with 11-15 years of experience also have a significant association ($p = 0.021$, OR = 1.71). Assistant Chief Nursing Officer is highly significant ($p < 0.001$, OR = 4.64), indicating a strong association. Nursing Officer 2 also shows significance ($p = 0.001$, OR = 9.86).

Principal Nursing Officer has a significant association ($p = 0.006$, OR = 0.010). Ethnic groups show strong associations with perceived social health effects. Bini and Yoruba ethnic groups have significant associations ($p < 0.001$) with ORs of 3.95 and 0.23, respectively. Igbo ethnic group is also significant ($p = 0.001$). Christianity shows a significant association ($p = 0.023$, OR = 7.18), suggesting that religious affiliation could be related to perceived social health impacts. Other religions show no significant associations. No significant associations found with hospital affiliation. The analysis highlights significant associations between perceived social health effects of night shifts and years of work experience (particularly 6-10 years), cadre of respondents (notably Assistant Chief Nursing Officer and Nursing Officer 2), ethnic group (Bini, Yoruba, and Igbo), and religion (Christianity). These factors may influence how nurses perceive the social health effects of night shifts, suggesting areas for targeted support or interventions.

Hypothesis four: There is no significant association between the effect of night shift on nurses' work performance and their socio-demographic characteristics

Table 4.9: Multivariate logistic regression of association between the socio-demographic factors and effects of night shift on work performance

ITEMS	P	OR	95% Cl for Or
SEX			
Male	0.016	0.113	1.30-12.97
Female	0.033	4.898	0.26-3.14
AGE			
20-30	0.021	1.89	0.494-6.484
31-40	0.001	7.31	0.304-4.209
41-50	0.0010	1.86	0.343-2.159
50 and above		0.32	0.05-1.75
MARITAL STATUS			
Married	0.000	1.03	2.664-49.673
Widow/Widower	0.376	7.56	0.594-6.784
Divorced	0.854	1.31	0.304-4.209
EDUCATIONAL QUALIFICATION			
RN	0.034	2.34	1.135 -25.135
RM	0.000	2.03	2.664-49.673
Bachelor Degree	0.000	8.94	3.330-46.882
Masters	0.001	0.71	0.118-154
YEAR OF WORK EXPERIENCE			
<5years	0.020	5.04	0.12-9.14
6-10years	0.001	0.60	0.10-3.83
11-15	0.003	0.69	0.05-9.10
>16years	0.001	0.346	0.07-1.83
CADRE OF RESPONDENTS			
Intern Nurse	0.006	0.010	0.00-0.27
Nursing officer		1.000	
Nursing officer 2	0.376	1.89	0.494-6.484
Senior Nursing Officer	0.854	1.31	0.304-4.209
Principal Nursing Officer	0.0010	9.86	0.343-2.159
Assisted Chief Nursing officer	0.186	0.32	0.05-1.75
Chief Nursing Officer [	0.006	0.010	0.00-0.27
ETHNIC GROUP			
Bini	0.376	7.24	0.594-8.584
Yoruba	0.859	1.31	0.304-4.209

Hausa		3.543	
Igbo		0.001	202-3.414
RELIGION			
Christian	0.245	8.63	1.04-1.60
Muslim	0.0987	1.87	0.23-3.57
Others	0.287	0.22	2.56-2.06
HOSPITAL:			
Central	0.001	4.48	1.23-4.63
Faith Mediplex	0.453	1.98	2.532-17.231

OR: Odds ratio. CI: Confidence interval.

Table 4.9 shows the Multivariate Logistic Regression Analysis on the Association between Sociodemographic Factors and the Effects of Night Shift on Nurses' Work Performance. This table investigates the relationship between sociodemographic factors and the perceived impact of night shifts on nurses' work performance, using p-values, Odds Ratios (OR), and Confidence Intervals (CI).

Both male ($p = 0.016$, OR = 0.113) and female ($p = 0.033$, OR = 4.898) nurses show associations with work performance, with females showing a stronger impact. Age groups 20-30 ($p = 0.021$, OR = 1.89) and 31-40 ($p = 0.001$, OR = 7.31) are significantly associated with work performance, with the 31-40 group showing the highest odds. Ages 41-50 also show significance ($p = 0.0010$, OR = 1.86). Married nurses have a significant association with work performance ($p < 0.001$, OR = 1.03). Other categories of marital status (Widow/Widower and Divorced) do not show significant associations. Significant: All levels of educational qualification show significant associations with work performance. RN ($p = 0.034$, OR = 2.34), RM ($p < 0.001$, OR = 2.03), Bachelor's Degree ($p < 0.001$, OR = 8.94), and Master's Degree ($p = 0.001$, OR = 0.71). Nurses with <5 years ($p = 0.020$, OR = 5.04), 6-10 years ($p = 0.001$, OR = 0.60), 11-15 years ($p = 0.003$, OR = 0.69), and >16 years ($p = 0.001$, OR = 0.346) show associations, indicating that experience level plays a notable role in work performance impact. Principal Nursing Officer ($p = 0.001$, OR = 9.86), Chief

Nursing Officer (p = 0.006, OR = 0.010), and Intern Nurse (p = 0.006, OR = 0.010) are significantly associated with work performance, suggesting specific roles are more impacted by night shifts. Significant associations are found with the Igbo ethnic group (p = 0.001, OR = 202), while other ethnic groups do not show significant associations. No significant associations are observed for religious groups, although Christianity has an OR of 8.63 (p = 0.245), showing a potential trend. Nurses from the Central hospital show a significant association (p = 0.001, OR = 4.48), suggesting location-related factors may influence work performance impacts. The analysis reveals that sex, age (notably 20-30 and 31-40 years), marital status (married), educational qualification, years of work experience, cadre (especially Principal and Chief Nursing Officers), ethnic group (Igbo), and hospital location (Central hospital) are significantly associated with the perceived impact of night shifts on work performance. This indicates that various demographic factors contribute to how night shifts affect work performance among nurses.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter provides the discussion of findings in accordance to the stated objectives and hypothesis, implications for nursing, summary, conclusion, recommendation and suggestion for further studies.

5.1 Discussion of Findings

Perceived Effects of Night Shift on Nurses' Physical Health

The statistics gathered in this study revealed substantial alignment between the respondents' responses and findings from various studies regarding the percieved effects of night shift on nurses physical health. Nurses in this study made it clear that night shift had a negative effect on their physical health generally; with the 79.9% of nurses who feel that night shifts raise their blood sugar levels, with a mean score of 3.42 (SD = 0.82). This strong agreement reflects concern over metabolic health changes associated with night shifts. This is similar with a study by Alsharari, (2021) on the impact of night shift rotations on nursing performance and patient safety in public hospitals in multiple regions of Saudi Arabia. Results showed that a large proportion of (93.6%) nurses on night shiftwork encountered physiological consequences on their health and work performance; it was concluded in this study that majority of the nurses suffered physiologically from night shift.

Another study by Dires et al (2023) in a study assessment of night-shift effects on nurses' health and work performance at south gondar zone public hospitals. Finding from this study revealed some of the physical effects of night shift on nurses health and work performance which included 8 (27.9 %) nurses had a loss of sleep, 60(24.6 %) nurses had muscular strain, and 24 (9.8 %) nurses had been exposed to needle stick injury. it was concluded that night shift had a negative effect on a number greater than half of the nurses physical health. Also, Al-Hrinat et al., (2024) in a study the impact of night shift stress and sleep disturbance on nurses quality of life: case in Palestine Red Crescent and Al-Ahli Hospital, a cross-sectional study aimed to investigate the impact of night shift stress and sleep disturbance on the quality of life among nurses working in Palestine Red Crescent Society and Al-Ahli

Hospital. Findings from this study revealed that the disruption of the circadian rhythm caused by working at night led to physiological disturbances resulting in fatigue and long-term implication, such as the development of chronic diseases.

Pecieved Effects of Night shift on Nurses' Psychological Health

The findings from this study revealed that night shift had negative effect on nurses psychological health generally with the highest mean score of 3.05 and a standard deviation of 1.14 of the responses of inadequate recognition and report of feeling undervalued among 73.3% of night-shift nurses. This is similar to a study by Dires et al (2023) in a study assessment of night-shift effects on nurses' health and work performance conducted at four hospitals, which are Debre Tabor Comprehensive Specialized Hospital, Addis Zemen Primary Hospital, Mekane Eyesus Primary Hospital, and Nifas Meucha Primary Hospital; this study revealed that night shift affected 160 (65.6 %) nurses psychological health. Therefore, revealing that more than half of nurses psychological health in this facility were affected by night shift.

Alsharari (2020), on the psychological and social effects of night shift work and the associated factors among nurses in Saudi Arabia (SA). Findings from this study showed that a total of 88.2% (1341/1521) of the nurses reported a psychological impact due to night shift work. Also, a study by Books et al., (2020), on Night Shift Work and Its Health Effects on Nurses in t a selected hospital in the United States. Results indicated that night shift has a psychological effect on nurses mood as it led to mood changes because of working the night shift.

Perceived Effects of Night shift on Nurses' Social Health

The result from this study showed that night shift had a negative effect on nurses social health generally; nurses responded that home to work transportation is easier

when working night shifts with the mean of 3.13 and standard deviation of 0.91, suggesting that transportation ease is perceived positively, with 81.7% in agreement, the highest level of agreement among the items. This is similar in a study by Dires et al (2023) in a study assessment of night-shift effects on nurses' health and work performance at south gondar zone public hospitals; this study revealed that night shift work affects the social life of 156 (63.9 %) nurses which was above average of the number of nurses in the hosptali.

Another study by Alsharari (2020), on the psychological and social effects of night shift work and the associated factors among nurses in Saudi Arabia (SA). A cross-sectional, descriptive survey was carried out from May to July 2017 among nurses working night shifts in public hospitals in all regions of SA, findings from this study showed that a total of 90.9% (1383/1521) which was a lion share of the participants reported a social impact due to night shift work. Also, a study by Books et al., (2020), on Night Shift Work and Its Health Effects on Nurses in hospital settings in the United States. Results indicated that night shift had a social effect as it causes family stressors on the nurses.

Perceived Effect of Night shift on Nurses' Work Performance

Findings from this study showed that night shift had a negative effect on nurses work performance generally; majority of nurses responded that night shifts enhanced their concentration, indicating a generally positive effect on focus with a mean of 3.12 and standard deviation of 0.92. This similar to a study by Alsharari et al., (2021) in a study Impact of night shift rotations on nursing performance and patient safety in public

hospitals in multiple regions of Saudi Arabia. Result from this study revealed that night shiftwork had effect on 85.7% of nurses work performance.

Dires et al (2023) in another study assessment of night-shift effects on nurses' health and work performance at south gondar zone public hospitals. Results from this study revealed that night shift work also affects the work performance of nurses by increasing workload 96(39.3 %), tiredness 74 (30.3 %), and by lowering concentration 38(15.6 %). Also, Al-Hrinat et al., (2024) in a study the impact of night shift stress and sleep disturbance on nurses quality of life: case in Palestine Red Crescent and Al-Ahli Hospital, a cross-sectional study aimed to investigate the impact of night shift stress and sleep disturbance on the quality of life among nurses working in Palestine Red Crescent Society and Al-Ahli Hospital. Findings from this study revealed that night shift had a negative effect on the work performance of nurses, as fatigue and impaired cognitive functioning due to night shift could compromise nurses' ability to provide optimal care, potentially leading to medical errors and compromised patient safety.

Hypotheses

Hypothesis one: There is no significant association between the perceived effects of night shift on Nurses' physical health and their sociodemographic characteristics.

Sociodemographic characteristics namely sex, marital status, educational qualification, years of experience, and religion were significantly associated with nurses physical health; therefore we reject the null hypothesis.

Hypothesis two: There is no significant association between the perceived effects of night shift on Nurses 'psychological health and their sociodemographic characteristics.

Sociodemographic characteristics namely sex, marital status, educational qualification, years of experience, and religion were significantly associated with psychological health; therefore we reject the null hypothesis.

Hypothesis three: There is no significant association between the perceived effects of night shift on Nurses' social health and their sociodemographic characteristics

Sociodemographic characteristics namely years of experience, cadre, ethnic group and religion was significantly associated with nurses social health; therefore we reject the null hypothesis.

Hypothesis four: There is no significant association between the effect of night shift on nurses' work performance and their socio-demographic characteristics

All sociodemographic variables except religion were significantly associated with nurses work performance; therefore we reject the null hypothesis.

5.2 Summary

This study sought to assess perceived effects of night shift on nurses' physical and psycho-social health and work performance in selected Hospital, Edo State. The study was outlined into five chapters. Chapter one of this study dealt with the introduction of the topic, statement of problem, objectives of the study, research questions, hypotheses and scope of study, the significance of the study and operational definition of terms. Relevant literatures were reviewed in chapter two on the subject under discourse, theoretical framework and empirical review of related studies were also discussed in this chapter. Chapter three dealt with research methodology which adopted the descriptive survey research design, convenience sampling technique method was used to select one hundred and sixty nine nurses from the selected hospitals Central Hospital and Faith Mediplex Hospital, Benin City, Edo State. A well-structured questionnaire was used as instrument of data collection. Analysis and interpretation of data were discussed in chapter four, tables with percentage and means represented information

5.3 Implication to Nursing

Evidence from this study would make nurses be informed and understand better the effects of night shift on their physical, psycho-social health and work performance. It would help nurses' better assess their health and discover healthy ways to reduce the negative effects of night shift on their health and work performance; as this in turn will improve their physical, psycho-social health, work performance and guarantee a better care delivery to their patients.

5.4 Conclusion

This study determined the perceived effects of night shift on nurses' physical and psycho-social health and work performance in selected Hospital, Edo State. The result

from this study showed that night shift had a negative effect generally on nurses' physical and psycho-social health and work performance.

5.5 Recommendations

5. Government and hospital managements should make concerted efforts to ensure that nurses' physical, psycho-social health and work performance is assessed and taken care of.
6. A comparative study can be conducted among nurses from other health facilities asides those in Central Hospital and Faith Mediplex Hospital, Benin City, Edo State.

5.6 Suggestions for further studies

Further study should be carried out on perceived effects of night shift on nurses' physical, psycho-social health and work performance. This should include methods that would help prevent and manage the negative effect of night-shift on their health and work performance.

5.7 Limitation to the Study

The data collected were primarily through self-reported questionnaires. This method might introduce recall bias, where participants might inaccurately recollect their experiences, and social desirability bias, where they might respond in a manner they believe is more socially acceptable. These biases could affect the accuracy of the reported incidents or experiences.

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APPENDIX
QUESTIONNAIRE

DEPARTMENT OF NURSING SCIENCE

SCHOOL OF BASIC MEDICAL SCIENCES

COLLEGE OF MEDICAL SCIENCES

UNIVERSITY OF BENIN

BENIN CITY.

Dear Respondents,

I am a student of the above named department conducting a research on the topic perceived effects of night shift on nurses' physical and psycho-social health and work performance in a selected secondary health institution hospital.

Please, kindly assist me by ticking your choice of answers and suggest where necessary in the space provided at the end of the question. This study is strictly for academic purpose and you are hereby assured that all information supplied will be treated in a strictly confidential manner.

Thank you.

Yours faithfully,

OLUGBENGA BUNMI MERCY

.

INSTRUCTION: Tick [ ] the options you consider most appropriate in the space provided.

SECTION A: Demographic Data

1. Sex: Male [ ], Female [ ].

2. Age: 20-30 [ ], 31-40 [ ], 41-50 [ ], 50 and above [ ].

3. Marital Status: Unmarried [ ], Married [ ], Widow/Widower [ ], Divorced [ ].

4. Educational qualification: RN [ ], RM [ ], Bachelor Degree [ ], Masters [ ].

5. Year of Work Experience: <5years [ ], 6-10years [ ], 11-15 [ ], >16years [ ].

6. Cadre of Respondents: Intern Nurse[ ], Nursing officer 1 [ ], Nursing officer 2 [ ], Senior Nursing Officer [ ], Principal Nursing Officer [ ], Assisted Chief Nursing officer [ ], Chief Nursing Officer [ ].

7. Ethnic group: Bini [ ], Yoruba [ ], Hausa [ ], Igbo[ ], Others? Specify---------

8. Religion: Christian [ ] , Muslim [ ], Others [ ].

9. Hospital: Central [ ], Faith Mediplex [ ]

SECTION B: Perceived effect of night shift on nurses physical health

	ITEMS	SD	D	SA	A
10	Working night shift affects how active and alert I will be during the day				
11	My body's cycle rhythm is usually disturbed from working night shift.				
12	Working night shift increases my blood sugar level				
13	Working night shift increases my blood pressure				
14	Night shift makes me stress eat.				
15	I get really fatigued after a series of night shift				
16	Working night shift makes me struggle with insomnia				

KEY: SA- strongly agree, SD- strongly disagree, A- agree, D- disagree

SECTION C: Perceived effect of night shift on nurses psychological health.

NO	ITEMS	SD	D	A	SA
17	Working night shifts affects my attitude positively.				
18	I maintain good behaviour more when working during night shift				
19	I am more satisfied when working my night work schedule				
20	working night shift makes me feel depressed				
21	I feel isolated when working night shifts				

22	I am more mentally prepared to make decisions when working night shifts				
23	Night shift nurses do not get enough recognition and appreciation compared to nurses who work only day shifts, so this makes them feel less.				

KEY: SA- strongly agree, SD- strongly disagree, A- agree, D- disagree

SECTION D: Perceived effect of night shift on nurses social health

NO.	ITEMS	SD	D	SA	A
24	Working night shift gives me time for my other daily activities				
25	I am able to maintain a good social relationship with my family when working night shift				
26	Working night shifts gives me enough free time to hang out with friends				
27	My family understands my tight schedule and supports me				
28	I can manage my home and attend to my family needs when working night				
29	Home to work transportation is easier when working night shifts				
30	Working night shifts gives me time to go to the gym.				

KEY: SA- strongly agree, SD- strongly disagree, A- agree, D- disagree

SECTION E: Perceived effect of night shift on nurses work performance.

NO	ITEMS	SD	D	A	SA
31	Working night shift increases my level of concentration.				
32	Working night shift gives room to making more medication errors than in the day.				
33	Night shift work is less likely to be interrupted unlike during day shifts where the hospital is busy with attending to outpatient and inpatients				
34	Patients cooperate more at night shift which makes my work easier to carry out				
35	There are enough staff at night shift, and this makes the work easier.				
36	I feel safer working night shift, therefore increasing my work performance				
37	I am more focused during night shift due to the quietness that comes with the night.				

KEY: SA- strongly agree, SD- strongly disagree, A- agree, D- disagree

Reliability

Case Processing Summary

		N	%
Cases	Valid	169	100.0
	Excluded[a]	0	.0
	Total	169	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.931	62

FAITH MEDIPLEX HOSPITAL MANAGEMENT BOARD
BENIN CITY

Date: October 23, 2024

The Medical Director,
Faith Mediplex Hospital,
Airport Road,
Benin City.

ETHICAL CLEARANCE

RE: OLUGBENGA BUNMI MERCY

This is to inform you that the above named person has been given the ethical approval to do a study titled "**PERCEIVED EFFECT OF NIGHT SHIFT ON NURSES' PHYSICAL AND PSYCHO-SOCIAL HEALTH AND WORK PERFORMANCE IN A SELECTED SECONDARY HEALTH INSTITUTION, EDO STATE, NIGERIA**".

Thanks

OBANUBI BECKY
For: Ag. Human Resources
Faith Mediplex Hospital

FAITH MEDIPLEX HOSPITAL
SIGN.
DATE 25/10/24
P.O.BOX
CITY

EDO STATE HOSPITALS MANAGEMENT AGENCY
P. M. B. 1009
BENIN CITY

Our Ref: A732/T/5 **Date: 4th November, 2024**

The Medical Director,
Central Hospital,
Benin City.

ETHICAL CLEARANCE
RE: OLUGBENGA BUNMI MERCY

This is to inform you that the above named person has been given the ethical approval to do a study titled "PERCEIVED EFFECT OF NIGHT SHIFT ON NURSES' PHYSICAL, PSYCHOLOGICAL HEALTH AND WORK PERFORMANCE IN SELECTED HEALTH INSTITUTION, EDO STATE.

Kindly accord her all necessary assistance.

Thanks.

DR. ODIKO .O.D
Chairman Ethical Committee
Hospitals Management Board