

**THE INFLUENCE OF STRESS ON WORK BEHAVIOUR AMONG NURSES IN A  
TERTIARY HEALTH INSTITUTION IN EDO STATE**

**BY**

**EKPE BERNARD THEOPHILUS**

**BMS1902128**

**FACULTY OF NURSING SCIENCE**

**COLLEGE MEDICAL SCIENCES**

**UNIVERSITY OF BENIN**

**BENIN CITY**

**OCTOBER, 2025**

**INFLUENCE OF STRESS ON WORK BEHAVIOR AMONG NURSES IN A TERTIARY  
HEALTH INSTITUTION EDO STATE**

**BY**

**EKPE BERNARD THEOPHILUS**

**BMS1902128**

**FACULTY OF NURSING SCIENCES  
COLLEGE OF MEDICAL SCIENCES,  
UNIVERSITY OF BENIN  
BENIN CITY.**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE AWARD OF THE  
DEGREE OF BACHELOR OF NURSING SCIENCE, FACULTY OF NURSING  
SCIENCES , UNIVERSITY OF BENIN, BENIN CITY.**

**OCTOBER, 2025**

## DECLARATION

This is to declare that this research project **titled INFLUENCE OF STRESS ON WORK BEHAVIOR AMONG NURSES IN A TERTIARY HEALTH INSTITUTION EDO STATE**” was carried out by **EKPE BERNARD THEOPPHILUS** is solely the result of my work except were acknowledged as being derived from other person(s) or sources.

MATRICULATION NUMBER: BMS1902128

FACULTY /COLLEGE : NURSING SCIENCES, COLLEGE OF MEDICAL SCIENCES  
UNIVERSITY OF BENIN, BENIN CITY.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**CERTIFICATION/APPROVAL**

This is to certify that this project titled " **INFLUENCE OF STRESS ON WORK BEHAVIOR AMONG NURSES IN A TERTIARY HEALTH INSTITUTION EDO STATE**" was carried out by **EKPE BERNARD THEOPHILOUS** with Mat. No. **BMS1902128** in the Faculty of Nursing Sciences under the supervision of **MRS M.A. INIOMOR**

---

**MRS M.A. INIOMOR**

SUPERVISOR

---

**DATE**

---

**PROF (MRS.) C. E. OMOROGBE**

Head of Department

---

**DATE**

---

**Chief Examiner**

---

**DATE**

## ABSTRACT

*Workplace abuse of nurses by patients and their relatives is a growing concern, affecting job performance, mental health, and overall well-being. This study assessed the factors influencing the abuse of nurses at the University of Benin Teaching Hospital (UBTH), Ugbowo, Benin City. The study aimed to determine the prevalence, types, and contributing factors of abuse experienced by nurses. A descriptive cross-sectional survey was conducted among 258 nurses selected through a stratified sampling technique. A structured questionnaire was used to collect data, and 251 responses were deemed valid, giving a response rate of 97.2%. Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 26.0, with results presented in tables and figures. The study found that verbal abuse was the most common form of abuse, experienced by 71% of respondents. Other reported forms of abuse included emotional distress (59%), workplace bullying (53%), and rude or dismissive behavior (66%). Physical assault (37%), unwanted sexual harassment (42%), and stalking (31%) were less frequently reported. Factors contributing to abuse included patient frustration due to delayed medical attention (mean = 3.1), lack of understanding of hospital policies (mean = 3.0), and emotional distress of patient relatives (mean = 3.2). Patients with psychiatric conditions, those under the influence of drugs or alcohol, and those with severe pain were more likely to abuse nurses. Abuse of nurses in UBTH is prevalent, with verbal and emotional abuse being the most reported. Factors such as patient frustration, unrealistic expectations, and poor communication contribute to these incidents. There is a need for hospital management to implement stricter policies against abuse, provide conflict resolution training for nurses, and improve communication between healthcare workers and patients' relatives. Additionally, security measures should be strengthened to ensure a safer work environment for nurses.*

**Keywords:** Factors, Influence, Abuse, Nurses, Patients, relatives, work environment

## **DEDICATION**

This work is dedicated to GOD ALMIGHTY who is providing me with the strength to complete my academic journey.

## ACKNOWLEDGEMENT

I wish to express my heartfelt gratitude to everyone who is contributing to the successful completion of this research project.

First and foremost, I am deeply thankful to my project supervisor Mr M.A Iniomor for your unwavering support, invaluable guidance, and commitment in nurturing my research skills throughout this journey. Your wisdom and expertise have been instrumental in shaping the quality and direction of this study, I am indeed grateful.

I would like to extend my appreciation to the Dean, Prof F.U Okafor, HOD of Medical-surgical Nursing Prof. (Mrs) C.E Omoregbe, Prof (Mrs) J.A Afemikhe, Prof (Mrs) R.E Esewe, Rev. Sr. Chukwura, Dr (Mrs) C.Enuku, Dr T.A Ehwareme Dr (Mrs) E.N Oyana, Mrs. M.A Iniomor, Mrs. Lawal, Mrs Ikhuobase, Mrs F. Esebanme and Mr Aragua as well as all other lecturers and non-academic staffs for their immense contribution, dedication and support to the successful completion of academic pursuit.

My deep appreciation goes to my beloved parents, Mr and Mrs Ekpe and my siblings for their continual support, prayers and encouragements. God Almighty continue to bless you all.

I want to appreciate my friends who have been of invaluable help throughout my journey of study; Tutu, Yimi, Audrey, Palmer, Amarachi, Melam and Deba, just to mention a few. God bless you all.

I dedicate a special note of gratitude to the participants of this study, whose willingness to share their insights and experiences made this research possible. This work is a culmination of collective effort, and I am truly grateful for the support I have received from all those who have been a part of this journey. Thank you all

## TABLE OF CONTENTS

COVER PAGE	i
TITLE PAGE	ii
DECLARATION	iii
CERTIFICATION/APPROVAL	iv
ABSTRACT	v
DEDICATION	vi
ACKNOWLEDGEMENT	vii
TABLE OF CONTENTS	viii
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background to the study	1
1.2 Statement of problem	3
1.3 Objectives of the Study	4
1.4 Research Questions	5
1.5 Hypothesis	5
1.6 Significance of the Study	5
1.7 Scope of the Study	6
1.8 Operational Definition of Terms	6

CHAPTER TWO	8
LITERATURE REVIEW	8
2.1    Conceptual Review	8
2.1.1    Concept of stress	8
2.1.2    Historical overview of stress concept	10
2.1.3    Stressors in Nursing Profession	11
2.1.4    Types of Stress Affecting Nurses	13
2.1.5    Work behaviour among nurses	15
2.1.7    Factors contributing to stress levels among nurses	19
2.1.8    Nursing stress scale	21
2.2    Theoretical review	23
2.2.1    Transactional Model of Stress and Coping	23
2.2.2    Application of Transactional Model of Stress and Coping	26
2.3    Empirical review	31
2.3.2    Impact of stress on work behavior among nurses	35
2.3.3    Factors contributing to stress levels among nurses	38
2.4    Summary of literature review	41
CHAPTER THREE	43
RESEARCH METHODOLOGY	43
3.1    Research Design	43

3.2	Research Setting	43
3.3	Target Population	44
3.4	Sample Size	45
3.6	Instrument for Data Collection	47
3.7	Validity of instrument	48
3.8	Reliability of Instruments	49
3.9	Method of Data Collection	49
3.10	Method of Data Analysis	50
3.11	Ethical Consideration	50
	CHAPTER FOUR	52
	RESULT AND FINDINGS	52
	CHAPTER FIVE	64
	DISCUSSION OF FINDINGS	64
5.1.	Discussion of major Findings	64
5.2	Implication to nurses	69
5.3	Summary	71
5.4	Conclusion	71
5.5	Limitations of study	72
5.6	Recommendations	73
5.7	Suggestion for Further study	74

REFERENCES

75

APPENDIX I

86

## LIST OF FIGURES

- Figure 4.1: Pie chart showing the Level of stress among nurses in a tertiary health institution In Edo using the nursing stress scale (NSS) 58
- Figure 4.2: Bar chart showing the Impact of stress on work behavior among nurses in a tertiary health institution in Edo state. 61
- Figure 4.3: Pie chart showing the Factors contributing to stress levels among nurses in a tertiary health institution in Edo state 63

## LIST OF TABLES

Table 3.1: University of Benin Teaching Hospital (UBTH) 2024 Staff Nurses Records at Human Resources Division	45
Table 4.2: Level of stress among nurses in a tertiary health institution In Edo using the nursing stress scale (NSS)	56
Table 4.3: Impact of stress on work behavior among nurses in a tertiary health institution in Edo state	59
Table 4.4: Factors contributing to stress levels among nurses in a tertiary health institution in Edo state	62

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background to the study

Stress is a significant psychological notion that can have detrimental effects on one's health, wellbeing, and ability to perform at work. According to Arnold et al. 1995, the word "stress" comes from the Latin word "stingere," which means "to draw tight." It is said to be a force that strains an individual by pushing a psychological or physical aspect outside of its spectrum of stability (Öğütü et al., 2021). The process through which environmental events (stressors or challenges) pose a threat to us, how we interpret these threats, and how they affect our emotions is known as stress (Topolska et al., 2022). Selye (1976) defined stress as an internal state of the organism that is typified by the general adaption syndrome. Stated differently, it is the body's general reaction to the strain placed upon it. It implies overly high demands that disrupt the social, psychological, and physiological systems (Calhoon, 2021). Stress can be either chronic or sudden (Noushad et al., 2021). It exists in several forms which could be social, emotional, psychological, occupational, or work-related.

Job stress is the term used to describe tension that employees endure at work. Many variables could be blame, including risk and danger, bad working conditions, an excessive workload, shift work, long hours, role ambiguity, role conflicts, and poor relationships with superiors, co-workers, or subordinate officers (Babapour et al., 2022). Certain responses reflect job stress in individuals or groups. Symptoms may include headaches, sleep difficulties, difficulty concentrating, short temper, upset stomach, work unhappiness, and low morale (Norful et al., 2021). Other signs or symptoms of job stress may include muscle tension and pain, chest tightness, elevated blood pressure, heart problems, frequent snapping or arguments, aggressive or hostile behavior, placing blame on others or management for stress, absenteeism, and a high rate of staff turnover (Javaid et al., 2023).

Work behavior encompasses individual and group actions in the workplace influenced by attitudes, motivation, and external factors such as organizational culture. For example, voluntary work behaviors (VWB), which include actions beyond job requirements, can be positive (organizational citizenship behaviors) or negative (counterproductive work behaviors), and are often mediated by factors like job satisfaction and self-control (AlEssa & Durugbo, 2022). Similarly, innovative work behavior (IWB) reflects employees' generation and application of new ideas, critical for organizational adaptability and sustainability (AlEssa & Durugbo, 2022). Negative behaviors, such as counterproductive work behaviors, are shaped by factors including meaningful work and organizational commitment (Aqil et al., 2023).

Nurses' work behavior is heavily influenced by organizational, psychological, and environmental factors, which directly impact patient care and outcomes. Proactive work behaviors among nurses, such as taking the initiative to improve care, are significantly predicted by factors like transformational leadership and work engagement, underscoring the importance of supportive management and a motivating work culture (El-Gazar et al., 2022). Stressors like excessive workloads and lack of emotional preparedness negatively affect caring behaviors, which are crucial for patient satisfaction and safety (Kaushik et al., 2021). Leadership behaviors also play a pivotal role; nurse managers' caring behaviors enhance nurses' work engagement and mitigate burnout, fostering a more positive and productive work environment (Al Otaibi et al., 2023).

In Nigeria, the interaction of work behavior and stress among nurses indicates important difficulties to their performance and well-being. High levels of occupational stress, caused by excessive workloads, bad working conditions, and role ambiguity, have been found to have a negative impact on job performance, resulting to burnout and lower care quality (Ella et al., 2021). For example, nurses in urban areas report stress-related symptoms such as anxiety and physical tiredness, which are exacerbated by inadequate support networks (Akpore et al., 2023). Stress has also been connected to

major health conditions, such as hypertension among nurses, highlighting the physiological toll of unrelenting work pressure (Chinedu-Eleonu et al., 2021).

To address these stress-related challenges, fostering a supportive work environment is essential in improving both the mental health and work behavior of nurses in Nigeria. Research indicates that managerial factors, such as clear communication, participatory decision-making, and emotional support from leadership, significantly alleviate stress and enhance job satisfaction (Muojekwu et al., 2023). Additionally, providing access to stress management programs, including mindfulness training and counseling, has been effective in reducing burnout and promoting resilience among nurses (Francis-Edoziuno et al 2024). Addressing systemic issues, such as workload redistribution and adequate staffing, is also critical in creating a sustainable and supportive work environment. By implementing these strategies, healthcare institutions can promote better coping mechanisms, mitigate the adverse effects of stress, and improve the overall quality of nursing care. Hence this study seeks to explore the influence of stress on work behaviour among nurses in a tertiary health institution in Edo state.

## **1.2 Statement of problem**

Nursing professionals in tertiary health institutions are integral to the healthcare delivery system, often operating under demanding conditions that predispose them to significant occupational stress. This stress can adversely affect their work behavior, leading to diminished job performance, increased absenteeism, and elevated turnover rates. In Nigeria, healthcare workers face heightened stress levels due to factors such as extended working hours, caregiving responsibilities, and the psychological demands of patient interactions (Nwobodo et al., 2023). A study by Dominic et al. (2024) focusing on nurses in Nigeria's Federal Capital Territory identified key stressors including work overload, workplace relationships, role conflict, and role ambiguity. These factors were found to significantly impact nurses' performance, underscoring the need for effective stress management strategies to

enhance productivity and patient care quality. In Edo State, Ndubuisi & Makata, (2022) in their study at Irrua Specialist Teaching Hospital, Irrua, Edo State, Nigeria, revealed that low workplace commitment among nurses in tertiary health institutions, may be attributed to occupational stress. This lack of commitment can further exacerbate issues related to job performance and patient care. Furthermore, a study conducted in a Nigerian health facility found that 82% of nurses perceived work-related stress as having a more adverse impact on their mental health compared to their physical health. This highlights the profound psychological effects of occupational stress on nursing professionals (Dartey et al., 2023). Given the critical role of nurses in patient care, understanding the influence of stress on their work behavior is essential. Addressing this issue is vital for improving nurse well-being, enhancing job performance, and ensuring the delivery of high-quality healthcare services. Therefore, this study aims to investigate the influence of stress on work behavior among nurses in a tertiary health institution in Edo State, Nigeria.

### **1.3 Objectives of the Study**

The general objective of this study is to examine the influence of stress on work behavior among nurses in a tertiary health institution in Edo State.

The specific objectives of this study include to;

1. measure the level of stress among nurses in a tertiary health institution in Edo state using the Nursing Stress Scale (NSS).
2. assess the impact of stress on work behavior among nurses in a tertiary health institution in Edo state.
3. investigate the factors contributing to stress levels among nurses in a tertiary health institution in Edo state.

## **1.4 Research Questions**

1. What is the level of stress among nurses in a tertiary health institution in Edo state using the Nursing Stress Scale (NSS).
2. What is the impact of stress on work behavior among nurses in a tertiary health institution in Edo state.
3. What are the factors contributing to stress levels among nurses in a tertiary health institution in Edo state.

## **1.5 Hypothesis**

There is no significant relationship between the influence of stress and work behaviour among nurses in a tertiary health institution in Edo state.

## **1.6 Significance of the Study**

The significance of this study lies in its potential to benefit nurses, nursing practice, nursing research, and nursing administration, ultimately enhancing the quality of patient care.

To nurses, this study highlights the profound impact of stress on nurses' work behavior and their ability to deliver optimal care. By understanding these influences, nurses can adopt effective stress management techniques, fostering resilience and improving job satisfaction. A reduction in stress levels enables nurses to maintain focus, make better decisions, and build stronger relationships with patients, ensuring high-quality care.

To nursing practice, the findings of this research emphasize the importance of integrating stress management policies into nursing practice. Addressing stress at the workplace can improve the efficiency and productivity of nurses, thereby optimizing the overall quality of care delivered to patients.

To nursing research, this study contributes to the growing body of knowledge on occupational stress in the nursing profession. It provides a foundation for further research into innovative interventions aimed at mitigating stress and promoting positive work behaviors among nurses, with a focus on sustaining quality patient outcomes.

To nursing administration, the study serves as a guide for nursing administrators to design supportive work environments that prioritize the mental health and well-being of nurses. It underscores the need for evidence-based strategies to reduce workplace stress, improve staff retention, and enhance both job satisfaction and patient care quality.

### **1.7 Scope of the Study**

This study focuses on the influence of stress on work behaviour among nurses.

This study is delimited to the influence of stress on work behaviour among nurses in a tertiary health institution and will be carried out in the University of Benin Teaching Hospital (UBTH), Edo state.

### **1.8 Operational Definition of Terms**

**Influence:** in this study, refers to the measurable effect or impact that stress has on the work behavior of nurses, as determined by changes in their attitudes, productivity, interactions, and overall performance of nurses quantified using the Nursing stress scale.

**Stress:** in this study, refers to a psychological and physical response to job-related pressures and demands experienced by nurses in a tertiary health institution, measured using a standardized stress assessment tool (Nursing stress scale).

**Work Behavior:** in this study, refers to the actions, attitudes, and performance exhibited by nurses in their workplace, including their productivity, teamwork, and professional conduct, as influenced by stress levels.

**Nurses:** in this study, refers to registered professionals providing patient care in University of Benin Teaching Hospital (UBTH), Edo State, who are directly involved in clinical and non-clinical duties.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

This chapter focuses on the review of related literature under the headings; conceptual review, theoretical review and empirical review. These are organized in order of the most important to least important to the variable of interest. Necessary literature would be gotten from published and unpublished works, articles, journals and textbooks in this study.

#### **2.1 Conceptual Review**

##### **2.1.1 Concept of stress**

The concept of stress has greatly developed and changed during the last few decades. Leading pioneers like Claude Bernard, Walter B. Cannon, and Hans Selye made groundbreaking discoveries that helped build the modern understanding of stress. The term "stress" no longer precisely detail the acute activation of the hypothalamic-pituitary-adrenal (HPA) axis and a sequence of compensatory sympathoadrenal reactions in response to a threat to internal stability as the existence of stress responses in isolated tissues and cells, as well as in lower creatures, is now evident (McCarty, 2023). Stress encompasses both beneficial and negative elements, such as adjusting to the current environment and foreseeing future difficulties, as well as negative elements like Selye's "general adaptation syndrome (GAS)" and risks to one's health and life. As a result, even Selye recommends that stress be divided into two categories: "eustress," which means pleasant stress, and "distress," which means negative stress (Thanem & Elraz, 2022). These days, the word "stress" is used in so many different settings that it is quite challenging to give a straightforward definition. According to the discipline, the term "stress" can indicate different things. For example, in physiology, it might mean "reaction," in psychology, "negatively perceived factor or situation," or in biology, "environmental factors affecting the cell, organ, or body." There is confusion and a knowledge gap

between the humanities and biomedicine since some of these interpretations indicate external forces, while others indicate the body's reaction. In clinical medicine, the term "stress" is also frequently used to describe a group of risk factors for a variety of illnesses with a psychosomatic component or to explain illnesses whose etiology is poorly understood (Awada et al., 2024). According to World Health Organization (WHO), 2023, "stress can be defined as a state of worry or mental tension caused by a difficult situation". Stress is a natural human response that prompts us to address challenges and threats in our lives. Everyone experiences stress to some degree. The way we respond to stress, however, makes a big difference to our overall well-being. Stress is a multifaceted concept that plays a significant role in human life. It is essentially the body's and mind's reaction to challenges, demands, or pressures that disrupt a person's sense of balance or stability. Stress can arise from both external and internal factors, and its impact varies depending on how individuals perceive and respond to these influences (O'Connor et al., 2021). At its core, stress serves an evolutionary purpose, enabling humans to survive in the face of danger. This is evident in the fight-or-flight response, a physiological reaction triggered by the hypothalamus in the brain when a person perceives a threat. This response activates the sympathetic nervous system and releases hormones such as adrenaline and cortisol. These hormones increase heart rate, enhance focus, and redirect energy to essential systems for survival (Correia et al., 2023). However, while this mechanism is life-saving in immediate danger, modern stressors like work deadlines, domineering supervisors, greater workload, poor shift-schedule balance, family conflicts, or societal expectations can keep this response activated for prolonged periods, leading to adverse effects. Stress is not inherently negative. Eustress, or positive stress, can motivate individuals to grow, achieve goals, or adapt to new situations. For instance, preparing for an exam or starting a new job often comes with stress that pushes individuals to focus and perform better. On the other hand, distress, or negative stress, occurs when challenges feel overwhelming or unmanageable. This type of stress can have far-reaching consequences, affecting physical health (e.g., high blood pressure, headaches), mental health (e.g., anxiety, depression), and

overall quality of life (Faiz et al., 2022). Stressors, the events or conditions that provoke stress, can be acute or chronic. Acute stressors are short-term and usually resolved quickly, such as a sudden argument or narrowly avoiding an accident. Chronic stressors persist over time and can stem from long-term issues like financial instability, chronic illness, or strained relationships. Chronic stress is particularly concerning as it can lead to burnout, a state of emotional, physical, and mental exhaustion caused by prolonged exposure to stress (Betke et al., 2021).

### **2.1.2 Historical overview of stress concept**

The concept of stress has undergone significant evolution since its inception. Walter B. Cannon introduced the idea of homeostasis in the early 20th century, describing the body's ability to maintain internal stability amid external changes (Barak et al., 2022). Hans Selye later expanded on this by defining stress as a nonspecific response of the body to any demand, leading to the formulation of the General Adaptation Syndrome, which outlines stages of alarm, resistance, and exhaustion. In recent years, the framework of the stress system has been further refined, integrating neurobiological and psychological perspectives to better understand how stress impacts health and disease. This contemporary understanding emphasizes the complex interplay between environmental stressors and individual perception, highlighting the role of cognitive and emotional factors in the stress response (Rochette et al., 2023).

We remain indebted to Hans Selye for making the concept of stress widely known. Selye (1974) reinterpreted stress from its physical definition as a force that causes strain and deformity, with the opposing force working to return the body to its unstressed state. Stress, according to Selye, is "the nonspecific response of the body to any demand upon it." This definition is so compelling that it has endured and is still extensively used today. Selye defined "nonspecific" as a collection of commonalities in reactions, independent of the type of stressor or causal agent (Rochette et al., 2023).

### 2.1.3 Stressors in Nursing Profession

In recent years, there has been a growing interest in the study of job stress and stressors in the workplace because of their impact on workers' health (Özyürek et al., 2021). Several complications, both physical and psychological or behavioral in nature, might be noted as detrimental impacts of work stress on the individual. These, in turn, can lead to corporate issues such as increased work absenteeism, lower work quality, lower productivity, job dissatisfaction, work-related accidents, frequent job changes, and professional abandonment, all of which can have negative consequences for clinical management and patient care (Mathew, 2022). Nursing is regarded as a stressful profession in the field of health sciences, according to recent studies such as Nurse Forecasting in Europe (RN4CAST) (Zaghini et al., 2023). In general, the primary occupational stressors in nursing are associated with specific units or contexts, such as Intensive Care Units (ICU), Emergency Services, Specialized Services, or Primary Care. However, there is a growing interest in identifying the specific occupational stressors of medical units in general hospitals. There are currently many levels of stress exposure based on the different medical specializations, areas, or services of the hospital, and there is also no international consensus on the choice of stress assessment method. Earlier relevant research at different hospitals found that the primary stressors are connected to the physical environment, demands of the work itself, work content, job performance, components of the organizational structure, or work environment (Mathew, 2022). Stress is regarded as a growing occupational pathology that is more likely to occur in activities requiring individualized devotion and is particularly prevalent in the healthcare services industry. Stress is defined as the same reaction or response to a stressor, and any stimulus that can cause a stress response is considered a stressor or stress factor (Wolff et al., 2021). Stressors in Nursing profession include;

### **Workload and Resource Challenges**

Nurses frequently face heavy workloads due to understaffing and high patient-to-nurse ratios. This strain is exacerbated in critical care areas such as emergency and intensive care units, where job demands are highest. Limited resources, including inadequate medical supplies and support staff, compound the issue (Boitshwarelo, 2024)

### **Emotional and Psychological Stress**

Caring for critically ill patients, witnessing suffering, and dealing with deaths contribute to significant emotional strain. During the COVID-19 pandemic, nurses reported increased stress from managing patient deaths and the fear of transmitting infections to their families (Marsden et al., 2022). In addition, stressors like uncertainty in patient treatment and lack of emotional preparedness were shown to lower care quality (Emami et al., 2022).

### **Interpersonal and Organizational Stress**

Interpersonal conflicts with colleagues, physicians, or patients are significant stressors. A lack of managerial support and ineffective communication channels often leave nurses feeling isolated and undervalued (Raesi et al., 2021). Organizational stressors, such as demanding schedules and inflexible work conditions, also adversely affect nurses' mental well-being (Marcatto et al., 2024).

### **Special Stressors During Health Crises**

During the COVID-19 pandemic, nurses reported stress from working with COVID-positive patients, managing increased patient loads, and the psychological toll of prolonged working hours. Institutional shortcomings in supporting nurses' safety and mental health exacerbated these challenges (Beck et al., 2023)..

### **Effects of Prolonged Stress**

Prolonged exposure to occupational stress leads to burnout, decreased job satisfaction, and mental health issues such as depression and anxiety. These conditions can compromise patient safety and care quality (Kaushik et al., 2021).

### **2.1.4 Types of Stress Affecting Nurses**

Stress is a prevalent issue in the nursing profession, stemming from the complex and demanding nature of the nurses' roles. Nurses experience various types of stress, including physical, psychological, emotional, organizational, social, environmental, and chronic stress. Each type uniquely impacts their well-being, job satisfaction, and performance.

#### **Physical Stress**

Physical stress in nursing arises from the physically demanding nature of their duties, including prolonged standing, lifting patients, and working extended or irregular shifts. These demands often result in fatigue, musculoskeletal injuries, and impaired alertness. Prolonged exposure to physical stress has been associated with cognitive and motor impairments, leading to decreased productivity and increased risk of errors in patient care. For example, a study by Bakal (2023) highlighted the severe impact of long working hours and insufficient rest on nurses' physical health and work efficiency, ultimately compromising patient safety.

#### **Psychological Stress**

Psychological stress results from the cognitive demands of nursing, such as decision-making under pressure, managing emergencies, and navigating ethical dilemmas. This type of stress is often exacerbated by high job demands, lack of autonomy, and inadequate support. Psychological stress can manifest as anxiety, depression, or burnout, significantly affecting mental health and job performance. Research has shown that a lack of workplace autonomy and poor interpersonal relationships are significant contributors to psychological stress among nurses (Assis et al., 2022).

#### **Emotional Stress**

Emotional stress is pervasive in nursing due to the profession's affective demands. Nurses often witness suffering, death, and grief, which can lead to emotional exhaustion and compassion fatigue. Providing emotional support to patients and families adds further strain. The COVID-19 pandemic

amplified these challenges, with many nurses reporting increased emotional stress from managing patient deaths and fears of infection. Emotional stress not only impacts mental health but also diminishes nurses' capacity for empathetic care (Boyle & Steinheiser, 2021).

### **Organizational Stress**

Organizational stress arises from systemic issues within healthcare institutions, such as poor management practices, understaffing, inadequate resources, and ineffective communication. These factors create a high-pressure environment, leading to dissatisfaction and burnout. For instance, workplace conflicts significantly increase the likelihood of depression and anxiety among nurses, as documented by Norful et al. (2024). Addressing organizational stress through improved management and clear communication strategies can mitigate these adverse effects

### **Social and Interpersonal Stress**

Social and interpersonal stress stems from interactions with patients, colleagues, and supervisors. Challenges such as managing demanding patients, conflicts with coworkers, and lack of managerial support contribute to a stressful work environment. During the COVID-19 pandemic, interpersonal stress intensified due to increased emotional demands and strained workplace relationships. Studies highlight the role of social stress in fostering feelings of isolation and dissatisfaction among nurses (Panchbhai et al., 2021).

### **Environmental Stress**

Environmental stress arises from external conditions within the workplace, such as noise, temperature extremes, and lack of privacy. These stressors contribute to cognitive overload and physical discomfort, adversely affecting nurses' performance. Devi et al. (2023) emphasized that environmental factors, coupled with inadequate resources, significantly impair nurses' ability to perform their duties effectively.

## **Chronic Stress**

Chronic stress is characterized by prolonged exposure to unresolved stressors, such as long-term understaffing, emotional demands, and systemic inefficiencies. This persistent stress contributes to higher rates of burnout, absenteeism, and decreased quality of care. Antczak-Komoterska et al. (2023) found that chronic stress significantly affects nurses' mental and physical health, necessitating targeted interventions to break the cycle.

### **2.1.5 Work behaviour among nurses**

Work behavior among nurses is a dynamic and multifaceted aspect of healthcare that significantly impacts the quality of patient care, organizational outcomes, and the well-being of nursing professionals. The way nurses engage with their duties, interact with colleagues, and respond to workplace challenges reflects a combination of their personal attributes, professional training, and the organizational environment. Understanding the nuances of work behavior requires examining its various dimensions, including caring practices, collaboration, leadership influences, stress responses, and innovation, alongside the impact of negative workplace behaviors and systemic challenges. Caring behavior is foundational to nursing practice and encapsulates the empathy, attentiveness, and dedication nurses exhibit toward patients. These behaviors are not only crucial for fostering trust but also for ensuring that patients feel supported during their healthcare journey. Research has shown that nurses with high levels of job engagement and satisfaction consistently demonstrate enhanced caring behaviors, which directly improve patient outcomes. De los Santos and Labrague (2021) emphasize that job engagement motivates nurses to go beyond their routine tasks, creating a more compassionate and patient-centered care environment. However, caring behaviors can decline when nurses experience burnout, stress, or a lack of support, underscoring the need for organizational strategies to sustain these behaviors. Proactive work behavior involves taking initiative, anticipating challenges, and implementing solutions to improve care delivery. This aspect of nursing work

behavior is vital, especially in high-pressure environments where quick decision-making and adaptability are required. Transformational leadership has been identified as a key driver of proactive behavior. Leaders who inspire, support, and empower their teams create an environment where nurses feel encouraged to address systemic inefficiencies and propose innovative solutions. Htet et al. (2024) found that transformational leadership and high work engagement are significant predictors of proactive behaviors, highlighting their importance in enhancing organizational and patient care outcomes. Collaboration is a cornerstone of effective nursing practice. Nurses frequently work in multidisciplinary teams, where collaboration ensures coordinated and efficient patient care. Hafaz (2022) in his work on the impact of collaboration behavior among staff nurses on their quality of work life and job satisfaction underscores that collaboration among nurses not only improves patient safety but also enhances the quality of work life. Collaborative practices are characterized by open communication, mutual respect, and shared decision-making. However, barriers such as interpersonal conflicts, hierarchical dynamics, and lack of trust can hinder collaboration, leading to suboptimal outcomes. Negative workplace behaviors, such as incivility, bullying, and interpersonal conflicts, are detrimental to nurses' work behavior and overall workplace harmony. Ramsey-Haynes (2021) observed that incivility leads to increased absenteeism, job dissatisfaction, and a higher incidence of errors in patient care. Such behaviors not only harm individual nurses but also undermine team cohesion and the organizational culture. Addressing these issues requires creating a zero-tolerance policy for negative behaviors and fostering an environment of respect and accountability. In a rapidly evolving healthcare landscape, innovative work behavior is essential. Nurses who engage in innovation contribute to improving clinical processes, adopting new technologies, and enhancing patient care quality. Shama and Ahmad (2021) identified that nurses with higher job satisfaction and supportive work environments are more likely to engage in such behaviors. Encouraging innovation requires creating opportunities for professional development, rewarding creative problem-solving, and facilitating knowledge-sharing among staff. Job engagement and satisfaction are critical for

promoting positive work behavior. Engaged nurses are more likely to exhibit proactive, collaborative, and innovative behaviors, which enhance patient outcomes and organizational performance. De los Santos and Labrague (2021) found that engagement fosters resilience and motivation, even in high-stress environments.

### **2.1.6 Impact of stress on work behaviour among nurses**

#### **Stress and Job Performance**

Occupational stress adversely affects nurses' job performance, often leading to reduced efficiency and increased errors. Prolonged exposure to high levels of stress impairs cognitive and motor functions, which diminishes nurses' ability to make sound decisions and provide effective care. Research by Bakal (2023) emphasizes that factors such as excessive workloads, long hours, and insufficient rest exacerbate fatigue, leading to poor performance and increased safety risks for patients. Stress-induced fatigue also undermines nurses' ability to maintain the attentiveness required for high-quality care. Hwang and Lee (2023) found a direct negative correlation between occupational stress levels and nurses' work performance, stressing the need for interventions to create a stress-reduced work environment.

#### **Stress and Patient Care Behaviors**

Stress significantly impacts nurses' caring behaviors, which are critical to patient satisfaction and safety. High levels of stress, arising from uncertainty in patient treatment or lack of emotional preparation, result in diminished empathy and attentiveness. A study by Emami et al. (2021) revealed that stress is associated with decreased caring behaviors, as workload and emotional exhaustion limit nurses' ability to connect with patients effectively. Despite these challenges, some studies indicate that stress can temporarily enhance caring behaviors as nurses strive to meet patient needs under pressure. However, sustained stress often leads to burnout, undermining the capacity for compassionate care (Evli et al., 2021).

### **Stress and Workplace Relationships**

Stress also affects interpersonal dynamics among nurses, often leading to strained relationships and reduced teamwork. Stress-induced behaviors, such as irritability and withdrawal, hinder effective communication and collaboration. In their study, Durmuş et al. (2024) highlighted how workplace incivility, amplified by stress, fosters presenteeism and turnover intentions, further destabilizing team cohesion. Moreover, stress impacts organizational social relations. Elhamid et al. (2023) found a weak but negative association between stress and the quality of nurses' workplace relationships, emphasizing the need for institutional support systems to foster positive interactions.

### **Stress and Job Satisfaction**

Stress is a major determinant of job satisfaction among nurses. Persistent stress, driven by workload, role ambiguity, and conflicts with colleagues, diminishes job satisfaction, leading to higher turnover rates. Gelčytė and Mažionienė (2023) found that stress caused by patient deaths, workload, and interpersonal conflicts significantly reduces job satisfaction and nurses who lack coping mechanisms or institutional support report higher dissatisfaction levels.

### **Stress and Mental Health**

The psychological toll of stress is profound, with many nurses reporting symptoms of anxiety, depression, and emotional exhaustion. Kaushik et al. (2021) documented that stressors such as conflicts with patients and supervisors are strongly linked to mental health challenges, further exacerbating negative work behaviors..

In oncology settings, where stress levels are particularly high due to patient acuity, a significant proportion of nurses exhibit signs of common mental disorders, impacting their focus and performance (Tonole et al., 2024).

### **Stress and Counterproductive Work Behaviors**

High stress levels contribute to counterproductive work behaviors, such as absenteeism, reduced effort, and even aggressive attitudes toward patients. Olorunfemi and Chika (2024) found that stress is associated with behaviors like medication errors and absenteeism, which compromise patient safety and team efficiency.

### **2.1.7 Factors contributing to stress levels among nurses**

#### **Excessive Workload**

Nurses often manage high patient loads, requiring them to care for several patients at once. Their duties extend beyond patient care to include administrative tasks such as record-keeping and collaboration with other healthcare professionals. The demanding workload results in physical fatigue, increased chances of medical errors, and emotional burnout. Studies show that stress levels are particularly high among nurses in secondary and tertiary healthcare facilities due to the complexity of cases they handle (Gelčytė & Mažionienė, 2023).

#### **Extended and Rotating Shifts**

Nurses frequently work long hours, often exceeding the standard eight-hour shift, and are required to cover night and weekend shifts. Rotating schedules disrupt natural sleep patterns, causing sleep deprivation, exhaustion, and decreased mental alertness. Prolonged work hours have been associated with lower job performance, impaired decision-making, and a higher risk of workplace accidents. Research indicates that continued exposure to irregular shifts can also contribute to chronic health conditions, including cardiovascular diseases and mental health issues (Hiestand et al., 2023).

#### **Emotional and Psychological Strain**

Nurses frequently encounter emotionally taxing situations, such as patient suffering, death, and distressed family members. They are expected to offer emotional support to patients and their families while managing their own well-being. This ongoing emotional burden can lead to compassion fatigue,

anxiety, depression, and burnout, particularly in the absence of psychological support (Evli et al., 2021).

### **Limited Autonomy in Decision-Making**

Many nurses experience stress due to a lack of control over their work environment and decision-making processes. Healthcare systems often operate under rigid hierarchies, requiring nurses to adhere strictly to protocols without the flexibility to make independent clinical decisions. This restricted autonomy can lead to frustration, reduced job satisfaction, and increased workplace stress (Assis et al., 2022).

### **Workplace Conflicts and Poor Team Dynamics**

Tensions among colleagues, supervisors, and other healthcare staff are significant sources of stress for nurses. Ineffective communication, lack of teamwork, and instances of workplace bullying or harassment create a negative work environment. Studies have shown that nurses who experience workplace conflicts report higher emotional distress and lower job satisfaction (Hrairi et al., 2021).

### **Staff Shortages and Resource Limitations**

Inadequate staffing levels place additional pressure on nurses, forcing them to take on more responsibilities, work overtime, and complete tasks hurriedly—leading to a higher risk of errors. Furthermore, a shortage of necessary medical supplies and technological support adds to their stress, making it challenging to deliver quality patient care (Heliso et al., 2024).

### **Exposure to Occupational Hazards**

Nurses frequently encounter workplace hazards such as exposure to infectious diseases, needlestick injuries, and physical strain from lifting patients. The fear of contracting infections, particularly during pandemics, heightens their psychological stress. Research indicates that nurses in high-risk environments, such as intensive care units (ICUs) and emergency departments, experience greater stress levels than those in general wards (Abdoh et al., 2021).

### **Low Wages and Financial Struggles**

Despite the demanding nature of their job, many nurses feel undercompensated. Financial strain is a major contributor to burnout, especially for those employed in public healthcare institutions where salaries are lower than in private hospitals. The absence of competitive wages and benefits often results in dissatisfaction and high turnover rates (Vu et al., 2024).

### **Job Insecurity and Career Development Challenges**

Nurses on temporary contracts or in workplaces with unclear career growth paths experience greater job-related stress. Uncertainty regarding job stability, promotions, and professional development negatively impacts motivation and mental well-being. Studies have linked a lack of career progression opportunities to increased job dissatisfaction and stress (Aman-Ullah et al., 2022).

### **Insufficient Psychological Support and Coping Mechanisms**

Many healthcare facilities lack adequate mental health services for nurses. The absence of counseling, stress management training, and peer support groups makes it difficult for them to cope with workplace stress. Research suggests that nurses without access to mental health support are at a higher risk of experiencing prolonged stress, anxiety, and depression (Tahara et al., 2021).

#### **2.1.8 Nursing stress scale**

The Nursing Stress Scale (NSS) is an essential tool for understanding the stressors experienced by nurses in their professional environments. Developed to measure and quantify the various sources of stress inherent in nursing practice, the NSS has become a cornerstone in both research and practical efforts to support the nursing workforce. The Nursing Stress Scale (NSS) was developed by Pamela S. Gray-Toft and James G. Anderson in 1981. The scale was introduced in their seminal paper titled "The Nursing Stress Scale: Development of an Instrument," published in *The Journal of Behavioral Assessment*. The development of the NSS was undertaken in the United States, where Gray-Toft and Anderson sought to address the growing recognition of stress as a critical factor affecting nurses'

mental health, job satisfaction, and overall performance. The NSS was designed to systematically identify the specific factors contributing to stress among nurses. Nursing, as a profession, is known for its emotionally, physically, and mentally demanding nature. Nurses often face high-stakes situations, balancing the care of critically ill patients, administrative responsibilities, and interpersonal challenges with colleagues, patients, and families. The scale aims to pinpoint these stressors to enable targeted interventions that can alleviate stress and improve overall job satisfaction and performance.

The importance of the NSS lies in its ability to provide a structured, evidence-based approach to evaluating stress, in research, it is used to study the relationship between workplace stress and outcomes such as burnout, job dissatisfaction, turnover, and even patient care errors. Researchers often rely on the NSS to examine how factors like work environment, leadership styles, and support systems influence stress levels. Gray-Toft and Anderson conducted a rigorous process of item development and validation to ensure the scale's reliability and applicability. They initially gathered input from practicing nurses to identify common stressors and developed a pool of items reflecting these challenges. The final scale consisted of 34 items grouped into seven subscales, each representing a specific source of stress:

**Death and Dying** – Stress related to dealing with terminally ill or dying patients, including emotional strain from patient suffering and grief management.

**Conflict with Physicians** – Stress arising from disagreements, miscommunication, or hierarchical tensions between nurses and doctors.

**Inadequate Preparation** – Feelings of being unprepared for assigned tasks, lack of training, or insufficient knowledge to handle clinical situations effectively.

**Lack of Support** – Perceived absence of emotional or managerial support from supervisors, administration, or colleagues, contributing to workplace isolation.

Conflict with Peers – Interpersonal conflicts, workplace bullying, or strained relationships with fellow nurses or other staff members.

Workload – Stress due to high patient loads, excessive administrative tasks, understaffing, and long working hours, leading to physical and mental exhaustion.

Uncertainty Concerning Treatment – Anxiety stemming from unclear medical orders, ambiguous treatment plans, or uncertainty about patient care decisions.

The NSS typically employs a Likert scale format, where respondents rate how stressful they find specific situations. Ratings usually range from "never stressful" to "very stressful." The total score provides an overall measure of stress, while subscale scores offer insights into specific stress domains. High scores indicate significant stress levels in the corresponding areas, serving as a signal for targeted interventions.

## **2.2 Theoretical review**

This study reviews the Transactional Model of Stress and Coping which is well-suited for studying stress in the nursing profession due to its focus on job-specific demands and coping mechanisms. This model is adopted as theory of best fit for this study.

### **2.2.1 Transactional Model of Stress and Coping**

The Transactional Model of Stress and Coping, developed by Richard Lazarus and Susan Folkman in 1984, explains how individuals perceive and respond to stress. It views stress as a dynamic interaction between a person and their environment rather than a direct reaction to a stressful event. This model emphasizes the role of cognitive appraisal and coping mechanisms in determining how stress impacts an individual. Stress is not just a result of external events but depends on how an

individual interprets and reacts to those events. The model highlights that people actively evaluate situations and decide how to respond based on their resources and coping strategies. This theory is widely applied in psychology, healthcare, education, and workplace settings to understand how people manage stress effectively or struggle with it.

### **Stressors (Sources of Stress)**

Stress begins with exposure to a stressor, which is any event, situation, or demand that challenges or threatens a person's well-being. Stressors can vary in intensity and duration, and they fall into different categories. Acute stressors are short-term and sudden, such as an exam, a job interview, or an argument. Chronic stressors persist over a long period, such as financial difficulties, job insecurity, or ongoing health issues. Daily hassles are minor but frequent annoyances like traffic congestion, long queues, or workplace deadlines. Life events involve significant changes, such as marriage, divorce, loss of a loved one, or moving to a new city. The impact of a stressor depends on how an individual perceives it and whether they believe they have the resources to manage it.

### **Cognitive Appraisal (How Stress is Perceived)**

Cognitive appraisal is the mental process of evaluating a stressor and determining its significance. Lazarus and Folkman emphasized that stress is not a direct response to an event but rather a result of how an individual interprets it. This appraisal process occurs in two stages:

In primary appraisal, the person assesses whether the situation is relevant to their well-being and, if so, whether it is harmful, threatening, or challenging. If an event is perceived as neutral or positive, it does not trigger stress. However, if it is seen as harmful (damage has already occurred), threatening (potential future harm), or challenging (opportunity for growth but requiring effort), the stress response is activated.

In secondary appraisal, the person evaluates their available resources and ability to cope with the stressor. This involves assessing personal skills, external support (such as family and friends), financial stability, and past experiences. If they believe they have sufficient resources, stress is

minimized. However, if they feel overwhelmed or unable to manage the situation, the stress response intensifies.

### **Coping Strategies (How People Respond to Stress)**

Once a person appraises a situation as stressful, they engage in coping mechanisms to manage it.

Coping strategies are categorized into two main types:

Problem-focused coping is used when a person believes they can change or control the situation. This involves taking direct action to address the stressor, such as seeking information, making a plan, solving a problem, or asking for advice. Examples include studying for an exam to reduce anxiety or creating a financial plan to manage debt.

Emotion-focused coping is used when a person perceives the situation as uncontrollable and focuses on managing their emotional response instead. This includes seeking social support, engaging in relaxation techniques, practicing mindfulness, or reframing negative thoughts. In some cases, avoidance or denial may be used, but these can be maladaptive if they prevent effective problem-solving.

### **Outcomes (Adaptation or Maladaptation)**

The way an individual copes with stress influences their emotional, psychological, and physical well-being. Positive adaptation occurs when a person effectively manages stress, leading to resilience, improved problem-solving, and emotional stability. When coping is ineffective, maladaptation occurs, which can result in chronic stress, anxiety, depression, burnout, or physical health problems like hypertension or weakened immunity.

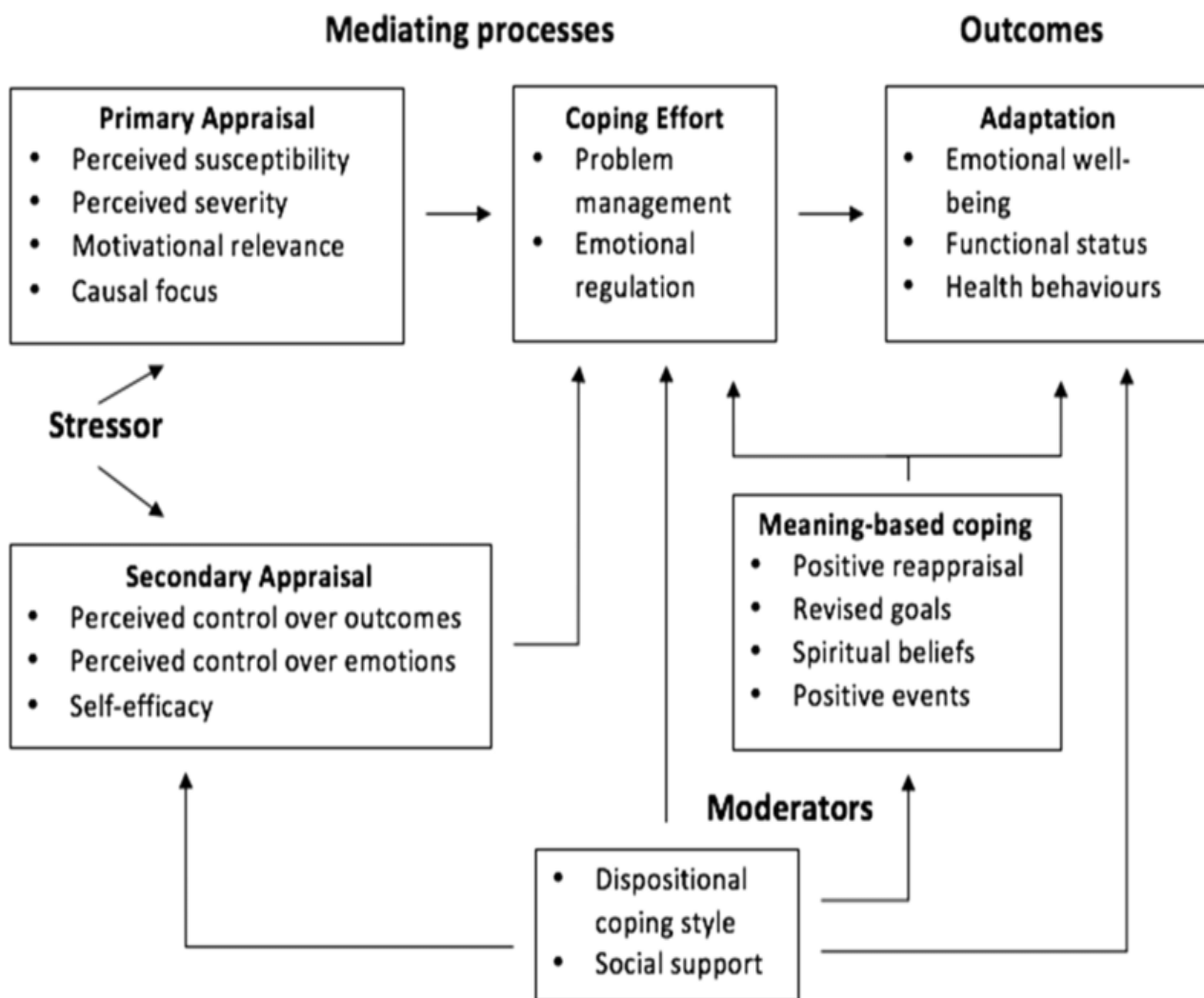


Figure 2.1 Transactional Model of Stress and Coping adapted from Lazarus & Folkman, (1984).

### 2.2.2 Application of Transactional Model of Stress and Coping

The transactional model of stress and coping provides a useful framework for understanding how nurses in a tertiary health institution in Edo State experience, interpret, and respond to workplace stress. By applying this model, we can analyze how different stressors affect nurses' work behavior and how their coping strategies influence job performance, emotional well-being, and professional efficiency.

## **Workplace Stressors Among Nurses**

Nurses in tertiary health institutions face a wide range of stressors due to the high demands of their profession. These stressors can be classified into different categories:

Acute stressors include sudden medical emergencies, dealing with critically ill patients, or conflicts with colleagues and supervisors. These stressors require immediate attention and can lead to increased pressure, anxiety, or momentary loss of concentration.

Chronic stressors are ongoing issues such as excessive workload, understaffing, long working hours, and lack of essential medical resources. Prolonged exposure to these stressors without adequate coping mechanisms can lead to burnout, fatigue, and decreased work efficiency.

Daily hassles include minor but frequent frustrations like dealing with difficult patients or their relatives, administrative bottlenecks, and communication breakdowns within the healthcare team. These stressors accumulate over time and contribute to overall stress levels.

Life events such as personal illness, family problems, or career stagnation may also compound work-related stress, affecting concentration, job satisfaction, and performance.

## **Cognitive Appraisal of Stress in Nurses**

The transactional model emphasizes that stress is not solely caused by external events but rather by how individuals perceive and interpret these events. The cognitive appraisal process occurs in two stages:

Primary appraisal is where a nurse evaluates whether a situation is stressful, neutral, or beneficial. For example, a nurse may see an overwhelming patient load as a professional challenge, leading to motivation and increased productivity. Conversely, another nurse may perceive the same situation as a threat, feeling overburdened and anxious, which may lead to mistakes or job dissatisfaction.

Secondary appraisal involves assessing the resources available to cope with the stressor. A nurse with strong support from colleagues, supervisors, and hospital management may feel more capable of

handling work stress, whereas a nurse who lacks support may feel helpless and unable to cope effectively.

### **Coping Strategies and Their Influence on Work Behavior**

Once stress is appraised, nurses adopt various coping strategies that directly impact their work behavior. These strategies can be categorized into two major types:

Problem-focused coping occurs when a nurse actively seeks to address the source of stress. Examples include improving time management, requesting assistance from colleagues, engaging in further training to enhance skills, or advocating for better working conditions. This type of coping is generally associated with positive work behavior, improved job satisfaction, and resilience.

Emotion-focused coping is used when the stressor is perceived as uncontrollable. Nurses may engage in relaxation techniques, seek social support from colleagues or family, or mentally reframe stressful situations to maintain emotional balance. While this approach can help regulate emotions, excessive reliance on it without addressing the root cause of stress may lead to disengagement or decreased job performance.

Maladaptive coping mechanisms such as avoidance, emotional detachment, substance use, or absenteeism can negatively impact work behavior. These behaviors may lead to reduced efficiency, increased medical errors, poor patient care, and job dissatisfaction.

### **Outcomes of Stress and Coping Strategies on Work Behavior**

The way nurses cope with stress has significant consequences on their professional behavior and the quality of patient care they provide.

Positive adaptation results when nurses effectively manage stress, leading to improved performance, job satisfaction, and resilience. These nurses are more likely to provide high-quality patient care, maintain professionalism, and contribute positively to the work environment.

Maladaptation occurs when coping mechanisms fail, resulting in chronic stress, burnout, frequent absenteeism, emotional exhaustion, and high staff turnover. Nurses experiencing maladaptation may struggle with patient interactions, make errors in medical procedures, and exhibit signs of detachment from their duties.

### **2.2.3 Strength and weakness of the theory**

The Transactional Model of Stress and Coping has several strengths that make it a valuable framework for understanding how individuals, including nurses, perceive and manage stress. One of its key strengths is its emphasis on the subjective nature of stress, recognizing that stress is not merely caused by external events but depends on how individuals appraise and respond to them. This makes the model highly flexible, as it accounts for differences in personal experiences, coping styles, and available resources.

Another strength of the model is its dynamic and process-oriented approach. Unlike earlier models that viewed stress as a linear cause-and-effect process, this model highlights that stress is an ongoing interaction between individuals and their environment. This makes it useful for studying workplace stress, as it considers how coping strategies evolve over time based on changing circumstances. Additionally, the model distinguishes between problem-focused and emotion-focused coping, which helps in identifying effective and ineffective stress management strategies in different situations.

The model is also widely applicable across various fields, including health psychology, workplace management, and education. In healthcare settings, for example, it provides valuable insights into how nurses handle job-related stress and how their coping mechanisms influence their performance and well-being. It has been instrumental in designing stress management interventions aimed at improving mental health, job satisfaction, and productivity.

Despite these strengths, the model has some limitations. One notable weakness is its heavy reliance on self-reported cognitive appraisal, which may not always be accurate. Individuals may not always

be aware of or able to articulate how they perceive stress, and their assessments may be influenced by personal biases or emotions. This makes it difficult to measure stress objectively.

Another limitation is that the model does not fully address biological and physiological responses to stress. While it focuses on psychological and behavioral coping mechanisms, it does not emphasize the role of automatic physiological reactions such as hormonal changes, heart rate increases, or immune system suppression. This limits its ability to explain the full impact of stress on health outcomes.

The model also assumes that coping strategies are always consciously chosen, whereas, in reality, individuals may react to stress impulsively or without deliberate thought. Some coping mechanisms, such as avoidance or denial, may occur automatically rather than as a result of conscious decision-making. Additionally, the distinction between problem-focused and emotion-focused coping is sometimes oversimplified, as individuals often use a combination of both strategies simultaneously. Lastly, while the model considers social and environmental factors, it does not always account for broader structural and systemic issues that contribute to stress. In workplace settings, such as nursing, stress may stem from institutional problems like poor staffing policies, inadequate resources, or management issues, which individual coping strategies alone may not fully address.

Overall, while the transactional model of stress and coping provides a comprehensive psychological framework for understanding stress perception and management, it has some limitations in measurement, biological emphasis, and structural considerations. However, its strengths in explaining individual differences and guiding stress management interventions make it a valuable tool in research and practical applications.

## **2.3 Empirical review**

This review aims to show areas of convergence and conflict by assessing the strength and weakness of reviewed studies with the aim of providing evidentiary value to this research study and uncovering research gaps for which this study will address.

### **2.3.1 Level of stress among nurses**

Zhang et al. (2022) carried out a study aimed to explore occupational stress, and the need for psychological counselling among nurses in China. A nationwide cross-sectional study was conducted among Chinese nurses from 311 cities who were randomly selected through a simple random sampling method. Occupational stress, perceived respect, and psychological counselling need were assessed using an online questionnaire validated by experts. The underlying associated factors were analysed using multiple logistic regression analyses. Results found from 51,406 valid online questionnaires that nurses in China perceive high levels of occupational stress.

Hemmati et al. (2021) conducted a meta-analysis study to investigate the prevalence of depression, anxiety, and stress among nurses working in Iranian hospitals. Published studies on nurses working in Iranian hospitals were investigated in this meta-analysis. All national and international online databases, including Web of Science, PubMed, Scopus, Embase, Cochrane Library, Scientific Information Database (SID), MagIran, and IranMedex, as well as Google Scholar, were searched using related keywords without any time limits until September 2017. The heterogeneity of studies was assessed using the I<sup>2</sup> index. Data were analyzed in STATA version 11.1. In 28 studies with a sample size of 6581 people, the prevalence of depression was 31% (n=2040) among Iranian nurses (31% in females and 28% in males) according to Beck's Depression Inventory (BDI); 30% (n=1974) (54% in females and 40% in males) according to the 21-Item Depression, Anxiety and Stress Scale (DASS-21); and 9% according to the General Health Questionnaire (GHQ-28). The prevalence of mild, moderate, and severe depression in nurses was 39%, 16%, and 20% according to the BDI; 8%,

24%, and 4% according to DASS-21; and 48%, 36%, and 16% according to GHQ-28, respectively. The prevalence of anxiety and stress was 85% and 67% in Beck's inventory, 28% and 38% in DASS-21, and 46% and 49% in GHQ-28, respectively.

Shah et al. (2021) conducted a study to measure rates of nurse burnout in the United Nation. Cross-sectional survey data collected from April 30 to October 12, 2018, in the National Sample Survey of Registered Nurses in the US. All nurses who responded were included (N = 50 273). Data were analyzed from June 5 to October 1, 2020. Results showed that among nurses who reported leaving their job in 2017, 31.5% reported burnout as a reason, with lower proportions of nurses reporting burnout in the West (16.6%) and higher proportions in the Southeast (30.0%). Compared with working less than 20 h/wk, nurses who worked more than 40 h/wk had a higher likelihood identifying burnout as a reason they left their job. These findings suggest that burnout is a significant problem among US nurses who leave their job or consider leaving their job. Health systems should focus on implementing known strategies to alleviate burnout, including adequate nurse staffing and limiting the number of hours worked per shift.

Ramírez-Elvira et al. (2021) carried out a a systematic review and meta-analysis with the aim to analyse the levels, prevalence of stress. A systematic review and meta-analysis were carried out in the Medline, Scopus and CINAHL databases. Fifteen articles were found for the systematic review and four for the meta-analysis. With a sample of n = 1986 nurses, the meta-analytic estimate prevalence for high emotional exhaustion was 31% (95% CI, 8-59%), for high depersonalization was 18% (95% CI, 8-30%), and for low personal accomplishment was 46% (95% CI, 20-74%).

Al Maqbali et al. (2021) carried out a systematic review and meta-analysis on the prevalence of stress, depression, anxiety and sleep disturbance among nurses. The following databases were searched: PubMed, CHINAL, MEDLINE, EMBASE, PsycINFO, MedRxiv and Google Scholar, from January 2020 up to 26th October 2020. Prevalence rates were pooled with meta-analysis using a random-effects model. Heterogeneity was tested using I-squared (I<sup>2</sup>) statistics. Findings revealed a total of

93 studies (n = 93,112), published between January 2020 and September 2020, met the inclusion criteria. The overall prevalence of stress was assessed in 40 studies which accounted for 43% (95% CI 37-49). The pooled prevalence of anxiety was 37% (95% CI 32-41) in 73 studies. Depression was assessed in 62 studies, with a pooled prevalence of 35% (95% CI 31-39). Finally, 18 studies assessed sleep disturbance and the pooled prevalence was 43% (95% CI 36-50).

Mekonen et al. (2022) conducted a study to determine the prevalence of work-related stress among nurses working in Debre Markos and the University of Gondar referral hospitals, northwest Ethiopia. An institution-based cross-sectional study was conducted from 19th February to 20th March 2019. A simple random sampling technique was used to select 348 study participants. A structured pretested self-administered questionnaire was used to collect data. Descriptive statistics, bivariable and multivariable logistic regression analyses were carried out. Results showed that prevalence of work-related stress among nurses was 29.2 % concluding that greater than one-fourth of nurses had work-related stress.

Opoku Agyemang et al. (2022) investigated the prevalence of depression, anxiety and stress among psychiatric nurses in Ghana. A cross-sectional survey was conducted in three psychiatric hospitals in Ghana between March 2020 and May 2021. Simple random sampling technique were used to select 311 psychiatric nurses. Beck's Depression Inventory, Beck's Anxiety Inventory and Perceived Stress Scale were used to assess depression, anxiety and stress, respectively. Data were analysed using SPSS version 23.0. Results showed that 19.6% of psychiatric nurses experienced mild to severe depression, 27% mild to severe anxiety and 42% mild to high stress. Regression analysis showed that participants with a diploma qualification had higher odds of having moderate depression compared to those with a master's degree. In terms of stress, participants with a diploma qualification were 29.6% less likely to have moderate stress compared to those with a master's degree. Those with a bachelor's degree were 7.1% less likely to have moderate stress compared to those with a master's degree.

Werke & Weret (20023) investigated occupational stress among nurses working at public hospitals, Addis Ababa, Ethiopia, 2022. An institutional based cross sectional study was conducted among 422 nurses working at public hospitals from March 1 to April 1/2022. Simple random sampling technique was used to select public hospitals. The calculated sample size was allocated proportionally to each hospital based on the number of nurses. Finally, systematic sampling method was used to approach the study participants. The data was collected by using a self-administered structured questionnaire (Expanded Nursing Stress Scale). The collected data was entered by Epi-data version 3.1 and analyzed by SPSS version 23. Descriptive analysis such as frequency distribution and measure of central tendency and variability (mean and standard deviation) was computed to describe variables of the study. Binary logistic regression was used to assess associations between dependent and independent variables. Findings found 198 (47.8%) of nurses were occupationally stressful. Concluding that job stress affected over half of the nurses therefore government policy makers, different stakeholders and hospitals need to collaborate to reduce nurses job related stress.

Akpor et al. (2023) investigated stress levels among nurses in selected hospitals in North Central Nigeria. The study employed a multistage sample technique method. The study design was descriptive and cross-sectional, using a quantitative strategy. The research instrument that was used for this study was a structured adapted questionnaire designed based on information adapted from similar studies. Data analysis was carried out using descriptive and inferential study statistics. The study revealed that the highest signs and symptoms of stress experienced by the participants included aches and pain (57.5%) and anxiousness (52.5%). The participants experienced moderate stress concluding that a conducive work environment should be maintained to promote effective nursing care.

Olude et al. (2022) carried out a study aimed primarily to determine the prevalence of depression, anxiety and stress among health care practitioners in a tertiary hospital in Lagos State during the COVID-19 pandemic. A descriptive cross-sectional study conducted between June and July 2021

among 1452 doctors and nurses in LASUTH, Ikeja, Lagos, Nigeria, selected by the multistage sampling method. Depression, anxiety and stress were assessed using the Patient Health Questionnaire, Generalised Anxiety Disorder and Perceived Stress Scale, respectively. Results showed that the majority of respondents were female (72.5%), with two-thirds being nurses. The prevalence of depression, anxiety and stress was 9.8%, 5.0% and 62.4%, respectively. Nurses showed a higher prevalence of these mental health conditions as compared with doctors. Olude et al. (2022) concluded that stress was the most prevalent mental health condition with nurses being the most affected.

### **2.3.2 Impact of stress on work behavior among nurses**

Babapour et al. (2022) carried out a study aimed to investigate the correlation between job stress with quality of life and care behaviors in nurses in two teaching hospitals, namely the “Artesh” and “29 Bahman” hospitals, Tabriz, Iran, which are in cooperation with a non-governmental university in Tabriz, within December-January 2020. A cross-sectional survey design study was performed with the participation of 115 nurses working in two hospitals. The nurses were selected via the availability sampling method and data were collected by demographic characteristics, nurses' job stress, quality of life, and Caring Dimension Inventory questionnaires. Results found that The mean total scores of job stress, quality of life and caring behavior were 2.77 (0.54), 56.64 (18.05) and 38.23 (9.39), respectively. There was a statistically significant and negative relationship between total job stress scores with quality of life ( $r = -0.44$ ,  $P < 0.001$ , Medium effect) and caring behaviors ( $r = -0.26$ ,  $P < 0.001$ , Small effect). Univariate linear regression showed that job stress alone could predict 27.9% of the changes in the total quality of life score and 4.9% of the changes in the total score of caring behaviors.

Evli et al. (2021) conducted a study in Kayseri City Education and Research Hospital, Turkey, to examine the effect of stress levels on nursing behavior. The study adopted a descriptive cross-

sectional design and included 205 nurses selected through convenience sampling. Data was collected using the Perceived Stress Scale and the Patient Care Behaviors-24 Scale, and analyzed using descriptive statistics and regression analysis. The findings revealed that stress significantly influenced patient care behaviors, with 26.6% of variance in care behaviors attributed to inadequate self-sufficiency perception and stress disturbance perception. The study concluded that while stress could enhance attentiveness in patient care, prolonged exposure to high stress levels led to burnout, necessitating workload reduction and stress management programs.

Hwang & Lee (2023) examined the impact of occupational stress on work performance among 122 nurses in a 300-bed hospital in J City, South Korea. The study used a descriptive survey design and employed simple regression analysis to assess the relationship between stress and performance. Results showed that higher occupational stress levels significantly reduced work performance, indicating that nurses with high stress levels exhibited lower job efficiency and increased fatigue. The study recommended the implementation of awareness programs and stress-reduction strategies to improve nurses' work conditions. Emami et al. (2022) investigated the relationship between workplace stressors and caring behaviours of nursing staff in inpatient wards. A cross-sectional, descriptive-correlational study was conducted on 260 nurses employed in the inpatient wards of seven teaching hospitals in Tehran, Iran during December 2019-February 2020. The participants were selected via convenience sampling. Data were collected using a demographic questionnaire, the nursing stress scale and the caring behaviours inventory. Data analysis was performed in SPSS version 20 using descriptive statistics and linear regression analysis. Findings revealed that job stress is correlated with nurses' caring behaviours, high levels of perceived job stress due to workload, uncertainty about patient treatment and lack of emotional preparation are associated with lower levels of nurses' caring behaviours.

Jachmann et al. (2025) carried out a systematic review aimed to investigate the prevalence of burnout, depression, and stress among ED nurses and physicians and the impact of these conditions on

personal and professional quality of life (QoL). The systematic literature search covered PubMed, PsycINFO, Embase, and grey literature databases. Articles were included if they were published in English or German by 31 January 2020, focused on ED physicians or nurses, and examined burnout, depression, or stress and its impact on professional or personal QoL. Quality assessment of the included studies was performed using a modified version of the Newcastle-Ottawa Scale. The systematic search resulted in 893 articles, of which 11 met the inclusion criteria. All reviewed studies had a cross-sectional study design and were of low to moderate quality. Depression, burnout, and stress were prevalent among ED physicians, ranging from 15.5% to 19.3%, 18% to 71.4%, and 19.5% to 22.7%, respectively. These were associated with lower job satisfaction in ED physicians, while findings in ED nurses also showed a considerable rate of burnout with an inverse association with compassion satisfaction. Burnout and stress were significantly associated with intentions to quit emergency medicine in ED physicians, whereas no association was found for depression. In addition, burnout showed a negative relationship to work-life balance and QoL, while higher stress levels were associated with lower life satisfaction in ED physicians.

Sani et al. (2024) carried out a study aimed to assess the influence of work-related stress on patient safety culture among nurses in a tertiary hospital. The study adopted a descriptive cross-sectional survey. The Population of the study was nurses who are currently serving as employees at Federal Medical Center Birnin-Kebbi, Nigeria. Proportional and systematic sampling methods were used in the selection of the sample of the study. The tools used for this study were adapted Hospital Survey on Patient Safety (HSOPS) and Nurses' Occupational Stressor Scale. Ethical approval was obtained from the research ethical committee of the hospital. Results showed that there was a significant negative correlation between stress and safety practice which implies that as stress increased safety practice decreased.

Olorunfemi & Chika, (2024) carried out a study to determine the perceived effect of occupational stress on work behavior among nurses at Benue State University Teaching Hospital in Makurdi. From

the facility's population of nurses, a quantitative survey randomly chose 150 respondents nurses, for the purpose of gathering information and testing the hypothesis, a well- developed and validated questionnaire was employed to gather data. Using SPSS, the data were descriptively analyzed, and an inferential analysis with a significance level of 5% was performed using Pearson's Chi-square test (0.05). Findings revealed the effect of occupational stress on work behavior as poor work performance 142 (94.7%), counterproductive work behavior 139 (92.7%), increases the incidence of absenteeism 112 (74.7%), high occurrence of medication error 120 (80%), Negative effect on teamwork 98 (65.3%), increases the incidence of Substance use disorders 95 (63.3), and aggressive attitude toward patients during nursing care 137 (91.3). Furthermore, there is a significant association between occupational stress and job satisfaction, patient safety, and nurses' attitudes toward their patients.

Akinwale et al. (2024) examined the perceived influence of work-related stress on caring behavior and quality of life among nurses at UNIOSUN Teaching Hospital, Osogbo, Nigeria. The study utilized a descriptive cross-sectional design with a sample of 206 nurses, selected through convenience sampling. Data collection was carried out using an adapted questionnaire based on previous studies and the WHO-BREF tool, and analyzed using descriptive statistics and Pearson correlation analysis. The results indicated that work-related stress was prevalent due to excessive workload (46.6%), handling dying patients (47.1%), and uncertainty in patient treatment (64.1%). Despite high stress levels, 65.1% of nurses maintained positive caring behaviors, though 38.5% reported a decline in quality of life. The study recommended expanding the nursing workforce to alleviate workload and enhance well-being

### **2.3.3 Factors contributing to stress levels among nurses**

Hrairi et al. (2021) conducted a hospital-based study in Tunisia to examine factors contributing to stress among nurses. The study used a descriptive cross-sectional design with 146 nurses, selected

through random sampling. Data collection was done using a structured self-report questionnaire based on the Perceived Stress Scale (10-item form) and analyzed using descriptive and inferential statistics. Findings revealed that 74.65% of nurses experienced severe stress, with rotating shifts (72.5%) and health problems being major contributors.

Abdoh et al. (2021) studied stress prevalence and contributing factors among primary healthcare nurses in Saudi Arabia. A cross-sectional study was conducted among 200 nurses, selected using random sampling. Stress levels were measured using the 21-Item Depression, Anxiety, and Stress Scale, and a 15-item workplace stress assessment tool was used for identifying stressors. Analysis was done using multivariate regression analysis. Results indicated that 30% of nurses experienced severe or very severe stress, with night shifts, chronic illnesses, and heavy workload being major contributors.

Assis et al. (2022) investigated occupational stress among hospital nurses in Brazil. A quantitative cross-sectional study was conducted with 353 nurses, using the Depression, Anxiety, and Stress Scale-21 and a sociodemographic questionnaire. Data analysis involved descriptive statistics and correlation tests. Findings showed that lack of workplace autonomy, poor social support, job dissatisfaction, and heavy workload were key stressors (Assis et al., 2022).

Vu et al. (2021) conducted a study to determine the frequency, sources, and risk factors for occupational stress among clinical nurses caring for COVID-19 patients in a Vietnamese tertiary hospital. A cross-sectional survey was conducted among all clinical nurses (184 nurses) at a tertiary hospital in Vietnam from March 15 to April 15, 2021. A questionnaire was used for collecting data. Data analysis was done by descriptive statistics, bivariate and multivariate logistic regressions. Risk factors were identified by adjusted odds ratio with 95% confidence interval and P values less than 0.05. Findings revealed the most stressors for participants were difficulties connected to inadequate emotional preparedness, patients and families, and death and dying, with subscale mean scores of 1.97, 1.88, and 1.88 points, respectively. In multivariate analysis, working at an emergency and

intensive care unit, usually or more frequently feeling heavy duty for patients,, and income decrease were risk factors associated with occupational stress.

Heliso et al. (2024) examined factors contributing to stress among nurses in Ethiopia. A cross-sectional study was conducted among 405 randomly selected nurses working in Hadiya Zone public hospitals from March 1 to 30, 2023. Data were collected using a pre-tested self-administered questionnaire. The data were entered using Epi-data version 3.1, and analysed using SPSS version 20.0. Multivariable logistic regression analysis was performed to identify factors associated with the level of work stress. Variables with a p-value <0.05 were considered statistically significant. Results showed that several factors were found to be associated with work stress, including being female, rotating shifts, working in the intensive care unit, and having post-basic training.

Okoye et al. (2021) conducted a study to determine the level of occupational stress and its major stressors among nurses in the Trauma Centre of National Hospital, Abuja, Nigeria. A descriptive cross-sectional study was carried out among 80 nurses, selected through total population sampling. Data was collected using a structured self-administered questionnaire and analyzed using SPSS version 20.0. Results indicated a high perceived stress scale (PSS) score of 28.2, with workload (50%) and lack of consumables (22.5%) emerging as the primary stressors. The study found that female nurses were more likely to experience depression (2.5%), and despite the high stress levels, none of the respondents had received psychological counseling in the past year. The study concluded that regular psychological support and workload redistribution were necessary to reduce occupational stress among nurses in high-pressure units.

Akpor et al. (2023) conducted a study to identify factors contributing to occupational stress among nurses in an urban metropolis in North Central Nigeria. A descriptive cross-sectional design was employed, with 250 nurses selected using multistage sampling. Data was collected via a structured questionnaire and analyzed using descriptive and inferential statistics. Findings revealed that the most common symptoms of stress were aches and pain (57.5%) and anxiousness (52.5%). The study

identified high workload, inadequate staffing, lack of administrative support, and emotional distress from patient care as major stressors. Multivariate analysis showed that years of experience ( $r = 0.631$ ,  $p = 0.000$ ), age ( $r = -0.243$ ,  $p = 0.045$ ), and memory problems ( $r = 0.227$ ,  $p = 0.003$ ) were significantly associated with stress levels. The study recommended improving nurses' working conditions, providing adequate staffing, and implementing stress management programs.

Olorunfemi & Chika (2024) conducted a study to assess occupational stress among nurses at Benue State University Teaching Hospital, Nigeria. A descriptive cross-sectional survey was conducted with 150 nurses, selected through random sampling. Data was collected using a validated structured questionnaire, and analysis was performed using Pearson's Chi-square test. The study identified heavy workload (62.5%), long work hours (48.3%), inadequate staffing (44.7%), and poor leadership support (39.2%) as the primary contributors to stress. Additionally, 74.7% of nurses reported frequent absenteeism due to stress, while 80% admitted to making more medication errors when under high stress levels. The study concluded that stress negatively impacted job performance and patient safety, recommending regular stress management programs, better work-life balance initiatives, and improved leadership engagement in hospitals.

## **2.4 Summary of literature review**

Stress is a significant occupational concern among nurses, arising from various factors that impact their well-being and job performance. This study reviewed the historical evolution of stress concepts, tracing its development from early physiological theories to modern psychological frameworks, emphasizing the dual nature of stress as both beneficial (eustress) and harmful (distress).

The study explored key stressors affecting nurses, including excessive workload, long and irregular shifts, emotional and psychological strain, workplace conflicts, inadequate staffing, and exposure to occupational hazards. It examined how these stressors contribute to chronic stress, burnout, reduced job satisfaction, and compromised patient care. Various types of stress—physical, psychological,

emotional, organizational, social, environmental, and chronic—were discussed, along with their impact on nurses' mental health and professional efficiency.

The Transactional Model of Stress and Coping, as applied in this study, explains how nurses perceive and respond to workplace stress through cognitive appraisal and coping mechanisms. This model highlights the dynamic interaction between stressors and nurses' ability to manage them, making it the best fit for understanding how stress affects work behavior and overall job performance in nursing practice.

This study critically analyzed existing literature on stress among nurses, identifying research gaps such as the need for more targeted stress management interventions in high-pressure healthcare settings, the role of leadership in mitigating workplace stress, and the long-term impact of stress on patient outcomes. Empirical studies were reviewed to provide evidence on stress prevalence, coping mechanisms, and its effects on nurses' work behavior, including absenteeism, decreased productivity, and increased medical errors.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

This chapter was discussed under the following subheadings: Research design, Research setting, Target population, Sample size, Sampling technique, Instrument for data collection, Validity of instruments, Reliability of instruments, Ethical consideration, Method of data collection, and Method of data analysis.

#### **3.1 Research Design**

This study was aimed at examining the influence of stress on work behaviour among nurses in a tertiary health institution, Benin City, Edo State. A descriptive, non-experimental survey research design was adopted for this study because it helped the researcher obtain adequate information regarding the research problem.

#### **3.2 Research Setting**

This study was carried out among nurses in a selected tertiary healthcare institution in Benin city, Edo state. The selected tertiary healthcare institution for this study is the University of Benin Teaching Hospital (UBTH), Benin city, Edo state. The study will include Nurses working as healthcare professionals rendering healthcare services at the University of Benin Teaching Hospital (UBTH), Benin city, Edo state.

Geographically, the University of Benin Teaching Hospital (UBTH) is a health care institution founded in 1973. It provides healthcare, teaching and research services. The hospital is situated along Ugbowo road in the heart of Benin city, Edo state. University of Benin Teaching Hospital (UBTH) is made up of various departments to render

specialized care to patients with varied problems. It is in charge of curative health care and training of personnel. It provides healthcare, teaching and research services. It comprises of various units such as medical, surgical and emergency units, outpatient departments/clinics, medical departments, Nursing service department, X-ray department, catering department, recreational therapy department e.t.c. It also has school of learning among which are; School of Nursing, School of Midwifery, School of Post Basic Nursing, School of information and health technology management e.t.c

### **3.3 Target Population**

The target population for this study consisted of nurses in selected wards (units) who were rendering healthcare services at the University of Benin Teaching Hospital (UBTH), Benin City, Edo State. The nurses in the selected wards (units) at UBTH comprised 689 nurses who were working in the following units where nursing services were required. The table below showed the total number of respondents that were used for the study:

**Table 3.1: University of Benin Teaching Hospital (UBTH) 2024 Staff Nurses Records at Human Resources Division**

<b>S/N</b>	<b>Institutional Unit</b>	<b>Total number of Nurses</b>
1.	Accident and Emergency Unit A	78
2.	Accident and Emergency Unit B	76
3.	Surgical Unit	92
4.	Obstetrics and Gynaecology	90
5.	Medicine Unit A	72
6.	Medicine Unit B	67
7.	Theatre complex	63
8.	Paediatrics	73
9.	Clinic Unit A	45
10.	Clinic Unit B	33
	<b>Total</b>	<b>689</b>

### **3.4 Sample Size**

The sampling size is the numbers of subjects or participant required and to which the study findings will be generalized. The size was estimated from a population of 689 respondents using Taro Yamane (1967) formula.

Where  $n$  = sample

$N$ = population size

$D$ = level of precision (confidence interval)

$N$ = 689

$D$ = 0.05

Thus;

$$\begin{array}{r}
 N = \quad \quad \quad 689 \\
 \hline
 \quad \quad \quad 1+689(0.05)^2 \\
 \\
 \quad \quad \quad 689 \\
 \hline
 \quad \quad \quad 1+ 689(0.0025) \\
 \\
 \quad \quad \quad 689 \\
 \hline
 \quad \quad \quad 1+1.7225 \\
 \\
 \quad \quad \quad 689 \\
 \hline
 \quad \quad \quad 2.7225
 \end{array}$$

Therefore, n = 253

10% attrition = 25

Therefore, the minimum sample size was 278

### 3.5 Sampling Technique

The stratified sampling technique was used in this study. Stratified sampling is a probability sampling technique where the population is divided into homogeneous subgroups or "strata" based on shared characteristics such as gender, age, income, education level and unit.

**Table 3.2: Showing Proportionate Sampling**

<b>S/ N</b>	<b>Institutional Unit</b>	<b>Total number of Nurses</b>	<b>Selected number of nurses in each unit</b>
1	Accident and Emergency Unit A	78/689x278	32
2	Accident and Emergency Unit B	76/689x278	31
3	Surgical Unit	92/689x278	37
4	Obstetrics and Gynaecology	90/689x278	36
5	Medicine Unit A	72/689x278	29
6	Medicine Unit B	67/689x278	27
7	Theatre complex	63/689x278	25
8	Paediatrics	73/689x278	30
9	Clinic Unit A	45/689x278	18
1	Clinic Unit B	33/689x278	13
	<b>Total</b>	<b>689</b>	<b>278</b>

### **3.6 Instrument for Data Collection**

A self-structured questionnaire was the instrument for data collection for this study. The items were constructed in a close-ended form where the respondents had to tick appropriately the option that suits their best knowledge. The questionnaires were divided into section A, B, C, and D to address the research objectives under investigation. Four-point likert scale and closed ended question format will be used in constructing the instrument that will be used for this study.

**Section A:** Contained demographic information of the respondents

**Section B:** Contained research data of the respondents on the level of stress among nurses in a tertiary health institution in Edo state using the Nursing Stress Scale (NSS)

**Section C:** Contained research data of the respondents on the impact of stress on work behavior among nurses in a tertiary health institution in Edo state.

**Section D:** Contained research data of the respondents on the factors contributing to stress levels among nurses in a tertiary health institution in Edo state

### **3.7 Validity of instrument**

The validity used in the study refers to the extent to which a test appears to measure what it is intended to measure and how accurately an assessment or measurement tool taps into the various aspects of the specific construct in question. Face and content validity was used to validate the research instruments.

#### **Face validity**

Face validity is whereby the measuring instrument appears to be valid as though it is measuring what it is intended to measure. To address validity, the questionnaire was submitted to the supervisor for expert review. The purpose of submitting the questionnaire to the supervisor was to ensure that the data collection tools was relevant and adequately answer the research questions.

#### **Content validity**

Content validity is the study's ability to measure and collect data about the phenomenon under study. The data collection tool was submitted to experts in nursing administration, research and a statistician for expert review.

### **3.8 Reliability of Instruments**

Reliability refers to how consistently a method measures something. If the same result can be consistently achieved by using the same methods under the same circumstances, the measurement is considered reliable (Middleton, 2023). A reliable instrument is one that can produce the same results when different versions of the same measurement scale is being compared (Middleton, 2023). A pilot study was carried out using split half method to test the reliability of the questions by administering same questionnaire to 28 nurses rendering healthcare services at St. Philomena Catholic Hospital, Benin city, Edo state as they share the same characteristics as the target population. The data were collected, analysed using Cronbach Alpha. Using this method, a correlation coefficient of more than 0.71 was considered that the instrument was reliable.

### **3.9 Method of Data Collection**

278 well-structured questionnaires containing questions relating to the research study were self-administered alongside with the help of a research assistant to sample survey at University of Benin Teaching Hospital (UBTH), Benin city, Edo state. While responses (data) being filled out in the questionnaire were formally and immediately gathered as they were guided on how to answer the questions. The researcher approached each nurse with information on the research, as well as the objectives of the study. Those interested were approached and given the questionnaire with basic explanation of what is required of them., this ensured voluntary participation. All respondents were assured of confidentiality and anonymity.

### 3.10 Method of Data Analysis

This study employed descriptive statistics using mean, standard deviation, frequency and percentage distribution, while Chi-square statistical analysis techniques was used to test the research hypotheses with the aid of the Statistical Package for Social Science (SPSS) version 24.0 for windows. The level of significance was set at  $p < 0.05$ .

### 3.11 Ethical Consideration

The researcher was aware of the ethical and moral principles involved in collecting information from respondents. Privacy, which is one of the most important aspects of human rights, was observed. Permission was obtained from the Ethical Clearance Committee at the University of Benin Teaching Hospital (UBTH), Benin City, Edo State, before data collection. The major ethical principles that were upheld during this study were:

1. **Autonomy:** Individuals were not forced to participate in the research project. The respondents were allowed to make decisions for themselves without duress.
2. **Maintenance of confidentiality:** Throughout the study, the researcher did not disclose personal details of the participants, such as names, phone numbers, and addresses. Confidentiality was ensured by restricting access to the information to only the supervisor and the statistician.
3. **Informed consent:** The researcher ensured that participants had full knowledge of the study, its purpose, procedures to be followed, and the possible risks and benefits. Participants gave their full consent before taking part in the study.

4. **Avoidance of plagiarism:** All sources used in the study were properly referenced.
5. **Right to fair treatment:** All participants were treated fairly without discrimination.

## CHAPTER FOUR

### RESULT AND FINDINGS

This chapter deals with the representation of data collected from respondents on the influence of stress on work behaviour among nurses in a tertiary health institution in Edo State. A total of 278 questionnaires were distributed to nurses in selected wards (units) who are currently rendering healthcare services at University of Benin Teaching Hospital (UBTH), Benin city, Edo state out of which 270 was properly filled and valid for data analysis, giving a response rate of 97.12.

**Table 4.1: Socio-demographic characteristics of respondents**

Variable	Frequency (n = 270)	Percent (%)
<b>Sex</b>		
Male	40	14.8
Female	230	85.2
<b>Age</b>		
Less than 30 years	107	39.6
30–39 years	91	33.7
40–49 years	42	15.6
50–59 years	23	8.5
60 years & above	7	2.6
<b>Marital Status</b>		
Single	134	49.6
Married	118	43.7
Divorced	11	4.1
Widowed	7	2.6
<b>Highest Educational Qualification in Nursing</b>		
Diploma	93	34.4
B.Sc	117	43.3
M.Sc	49	18.1
Ph.D	11	4.1
<b>Ethnicity</b>		
Bini	91	33.7
Esan	47	17.4
Hausa	21	7.8
Igbo	39	14.4
Yoruba	31	11.5
Others (specify)	41	15.2

**Table 4.1 Cont'd**

<b>Variable</b>	<b>Frequency (n = 270)</b>	<b>Percent (%)</b>
<b>Religion</b>		
Christianity	208	77.0
Islam	46	17.0
Others (specify)	16	5.9
<b>Length of Post-qualification Nursing Experience</b>		
Less than 1 year	19	7.0
1–5 years	98	36.3
6–10 years	83	30.7
11–15 years	47	17.4
16 years and above	23	8.5
<b>Length of Experience on Current Hospital Unit</b>		
Less than 1 year	29	10.7
1–5 years	101	37.4
6–10 years	69	25.6
11–15 years	48	17.8
16 years and above	23	8.5
<b>Rank (Position of the Nurse)</b>		
Nursing Officer	88	32.6
Senior Nursing Officer	66	24.4
Principal Nursing Officer	49	18.1
Assistant Chief Nursing Officer	33	12.2
Chief Nursing Officer	28	10.4
Others (specify)	6	2.2

Table 4.1 Shows Socio-demographic Characteristics of Respondents which reveals that a total of 270 nurses participated in the study. The majority of the respondents were female, accounting for 85.2% (n = 230), while males made up 14.8% (n = 40). This reflects the general trend in the nursing profession, where females are typically more represented. In terms of age distribution, the highest proportion of respondents (39.6%) were under 30 years of age. This was followed by those aged 30–39 years (33.7%), 40–49 years (15.6%), 50–59 years (8.5%), and those aged 60 years and above, who constituted the smallest group at 2.6%. Regarding marital status, almost half of the respondents (49.6%) were single, while 43.7% were married. A smaller proportion were either divorced (4.1%) or widowed (2.6%). When asked about their highest educational qualification in nursing, 43.3% held a Bachelor of Science (B.Sc) degree in Nursing, making it the most common qualification. This was followed by diploma holders at 34.4%, Master’s degree holders at 18.1%, and those with a Ph.D. at 4.1%. The ethnic composition of respondents was diverse, with the Bini ethnic group forming the largest subgroup (33.7%). This was followed by Esan (17.4%), Igbo (14.4%), Yoruba (11.5%), Hausa (7.8%), and others (15.2%). In terms of religious affiliation, a significant majority of respondents identified as Christians (77.0%), while 17.0% were Muslims. The remaining 5.9% belonged to other religious groups. Regarding length of post-qualification nursing experience, the largest group had 1–5 years of experience (36.3%), followed by those with 6–10 years (30.7%). Respondents with 11–15 years accounted for 17.4%, those with 16 years and above made up 8.5%, and 7.0% had less than one year of experience. The length of experience on their current hospital unit followed a similar pattern: 37.4% had worked 1–5 years in their current unit, 25.6% for 6–10 years, 17.8% for 11–15 years, and 8.5% for 16 years and above. Only 10.7% had been on their current unit for less than a year. Finally, in terms

of professional rank, the largest proportion were Nursing Officers (32.6%), followed by Senior Nursing Officers (24.4%), Principal Nursing Officers (18.1%), Assistant Chief Nursing Officers (12.2%), and Chief Nursing Officers (10.4%). A small percentage (2.2%) held other unspecified positions.

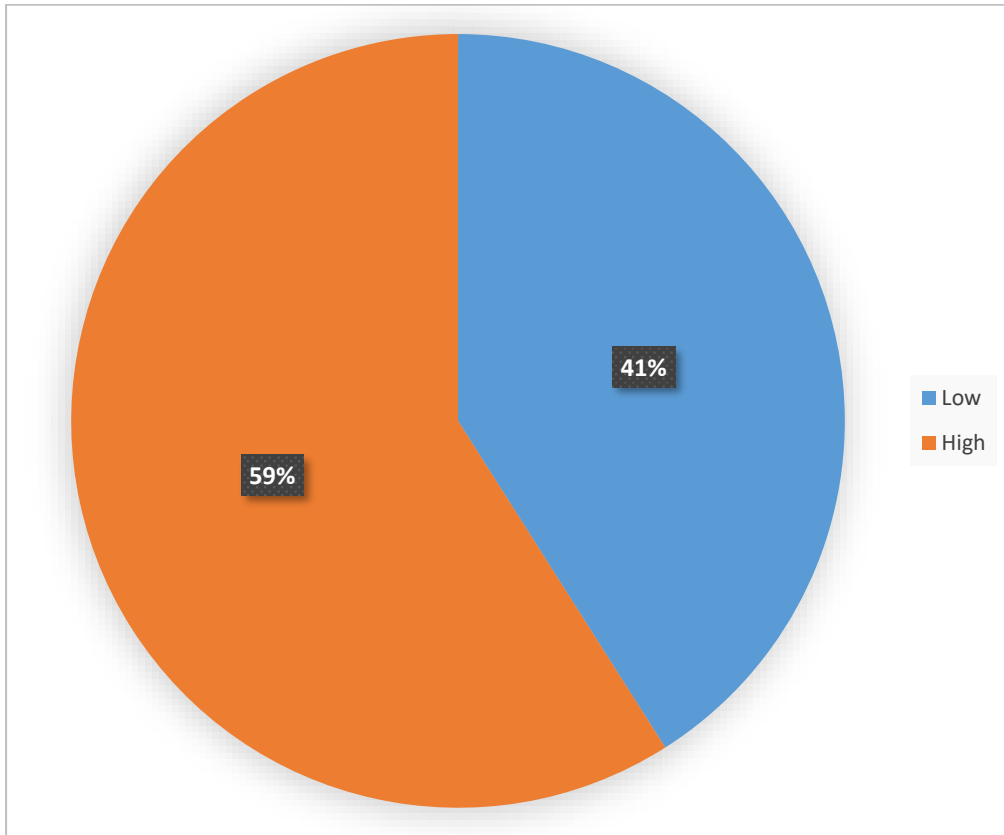
**Research Question 1:** What is the level of stress among nurses in a tertiary health institution in Edo state using the Nursing Stress Scale (NSS).

**Table 4.2: Level of stress among nurses in a tertiary health institution In Edo using the nursing stress scale (NSS)**

Items	Never	Somet imes	Often	Alway s	Me an	Rema rk
Work overload and insufficient staff support	21 (7.8)	64 (23.7)	106 (39.3)	79 (29.3)	2.9	High
Dealing with uncooperative patients or families	30 (11.1)	81 (30.0)	99 (36.7)	60 (22.2)	2.7	High
Fear of making mistakes that could harm patients	18 (6.7)	56 (20.7)	113 (41.9)	83 (30.7)	3.0	High
High patient-to-nurse ratio affecting quality care	24 (8.9)	67 (24.8)	104 (38.5)	75 (27.8)	2.9	High
Conflict with physicians and other healthcare staff	52 (19.3)	97 (35.9)	81 (30.0)	40 (14.8)	2.4	Low
Lack of administrative support and recognition	35 (13.0)	84 (31.1)	91 (33.7)	60 (22.2)	2.7	High
Exposure to traumatic events such as patient death	41 (15.2)	89 (33.0)	91 (33.7)	49 (18.1)	2.5	High
Uncertainty in handling patient treatments	48 (17.8)	76 (28.1)	87 (32.2)	59 (21.9)	2.6	High
	<b>Grand Mean</b>				<b>2.8</b>	<b>High</b>

**Mean cut-off = 2.5**

Table 4.2: shows the level of stress among nurses in a tertiary health institution in Edo State using the Nursing Stress Scale (NSS), the item with the highest mean score was "Fear of making mistakes that could harm patients" with a mean of 3.0, indicating a high level of stress. This was followed by "Work overload and insufficient staff support" and "High patient-to-nurse ratio affecting quality care," both with a mean of 2.9, also reflecting high stress levels. "Dealing with uncooperative patients or families" and "Lack of administrative support and recognition" each had a mean score of 2.7, while "Uncertainty in handling patient treatments" scored 2.6. "Exposure to traumatic events such as patient death" recorded a mean of 2.5, which still met the threshold for a high stress level. The only item rated low was "Conflict with physicians and other healthcare staff," which had the lowest mean score of 2.4. The grand mean score of 2.8 suggests that, overall, nurses in the institution experience a high level of stress in the workplace.



**Figure 4.1: Pie chart showing the Level of stress among nurses in a tertiary health institution In Edo using the nursing stress scale (NSS)**

Figure 4.1 illustrates the overall level of stress among nurses in a tertiary health institution in Edo State. The majority of respondents, 160 (59), reported experiencing a high level of stress, while 110 (41) indicated a low level of stress. This suggests that a significant proportion of nurses in the institution are working under considerable stress.

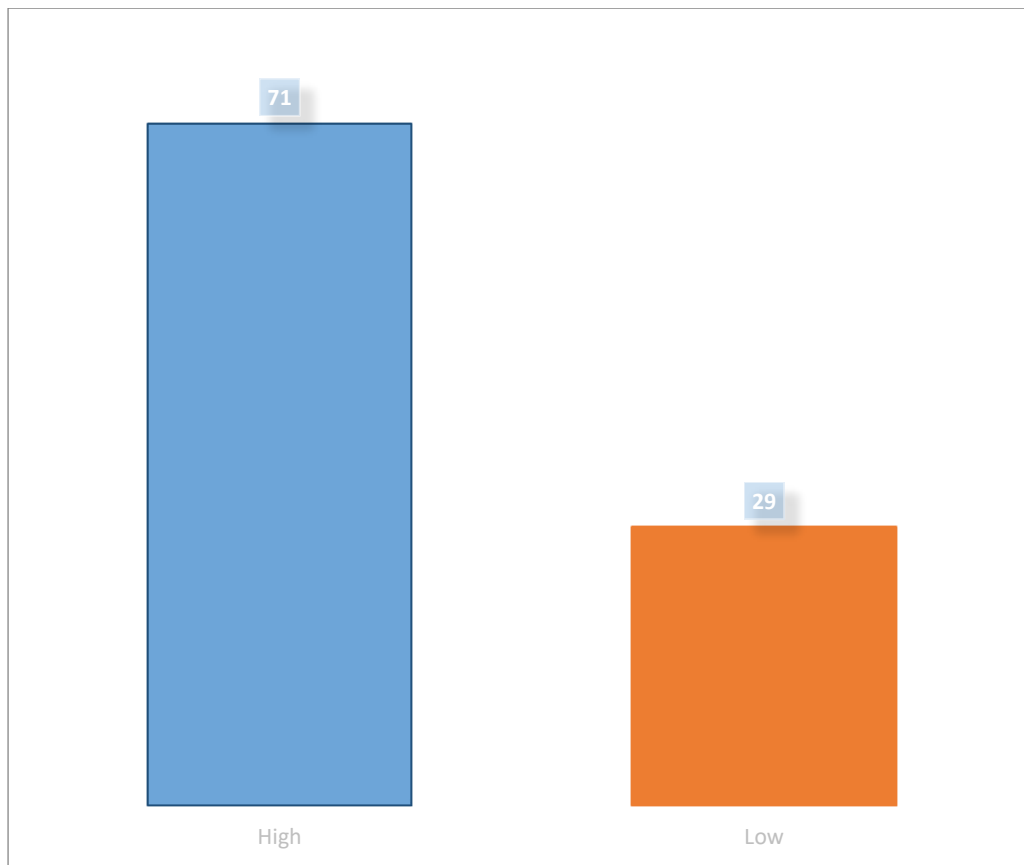
**Research Question 2:** What is the impact of stress on work behavior among nurses in a tertiary health institution in Edo state.

**Table 4.3: Impact of stress on work behavior among nurses in a tertiary health institution in Edo state.**

Items	Strongly agree	Agree	Disagree	Strongly disagree	Mean	Remark
I experience burnout due to work-related stress	97 (35.9)	103 (38.1)	45 (16.7)	25 (9.3)	3.0	High
Stress leads to decreased concentration and productivity	84 (31.1)	116 (43.0)	40 (14.8)	30 (11.1)	2.9	High
I have considered leaving my nursing job due to stress	78 (28.9)	89 (33.0)	66 (24.4)	37 (13.7)	2.8	High
Workplace stress affects my interaction with colleagues	91 (33.7)	101 (37.4)	51 (18.9)	27 (10.0)	2.9	High
I struggle with emotional exhaustion at work	85 (31.5)	106 (39.3)	54 (20.0)	25 (9.3)	2.9	High
My job stress affects my personal life and well-being.	104 (38.5)	93 (34.4)	47 (17.4)	26 (9.6)	3.0	High
	<b>Grand Mean</b>				<b>3.0</b>	<b>High</b>

**Mean cut-off = 2.5**

Table 4.3 shows Impact of stress on work behavior among nurses in a tertiary health institution in Edo state. The item with the highest mean score was "I experience burnout due to work-related stress" and "My job stress affects my personal life and well-being," both with a mean of 3.0, indicating a high impact of stress on work behavior. This was followed closely by "Stress leads to decreased concentration and productivity," "Workplace stress affects my interaction with colleagues," and "I struggle with emotional exhaustion at work," each with a mean score of 2.9. "I have considered leaving my nursing job due to stress" had the lowest mean of 2.8, though still reflecting a high impact. The grand mean of 3.0 confirms that stress significantly affects nurses' work behavior in the institution.



**Figure 4.2: Bar chart showing the Impact of stress on work behavior among nurses in a tertiary health institution in Edo state.**

Figure 4.2 shows the impact of stress on work behavior among nurses in a tertiary health institution in Edo State. A majority of the respondents, 191 (71), reported that stress had a high impact on their work behavior, while 79 (29) indicated a low impact, highlighting that stress significantly affects job performance for most nurses.

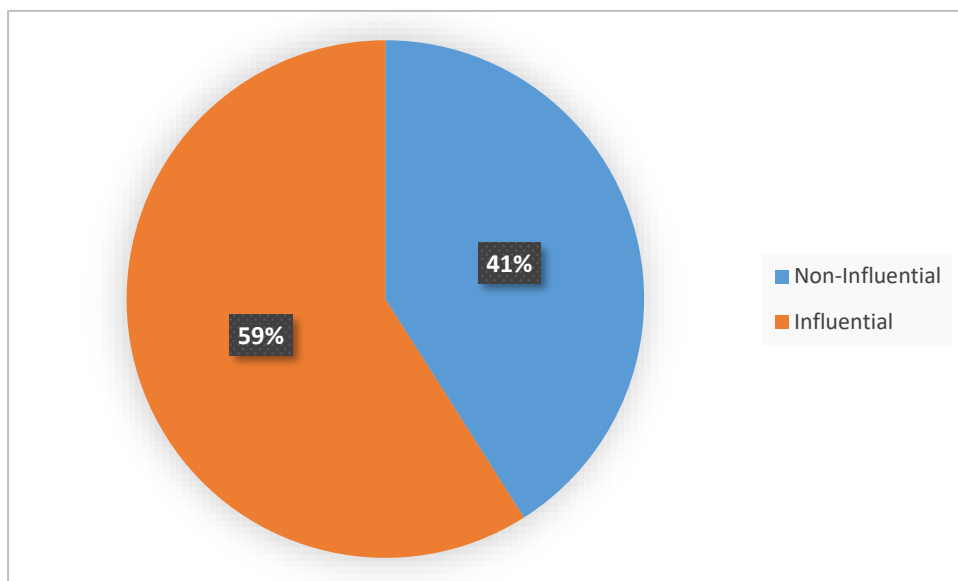
**Research Question 3:** What are the factors contributing to stress levels among nurses in a tertiary health institution in Edo state.

**Table 4.4: Factors contributing to stress levels among nurses in a tertiary health institution in Edo state**

<b>Items</b>	<b>Not a factor</b>	<b>Minor factor</b>	<b>Major factor</b>	<b>Extreme factor</b>	<b>Mean</b>	<b>Remark</b>
Long working hours and shift rotations	32 (11.9)	58 (21.5)	99 (36.7)	81 (30.0)	2.8	Influential
Workplace violence and harassment	45 (16.7)	89 (33.0)	88 (32.6)	48 (17.8)	2.5	Influential
Poor working conditions and lack of resources	28 (10.4)	64 (23.7)	97 (35.9)	81 (30.0)	2.9	Influential
Emotional strain from patient care responsibilities	34 (12.6)	69 (25.6)	93 (34.4)	74 (27.4)	2.8	Influential
Work-life imbalance due to job demands	39 (14.4)	73 (27.0)	89 (33.0)	69 (25.6)	2.7	Influential
Lack of autonomy and decision-making power	56 (20.7)	88 (32.6)	81 (30.0)	45 (16.7)	2.4	Influential
Pressure to meet high job performance expectations	41 (15.2)	71 (26.3)	92 (34.1)	66 (24.4)	2.7	Influential
	<b>Grand Mean</b>				<b>2.7</b>	<b>Influential</b>

**Mean cut-off = 2.5**

Table 4.4 Reveals Factors contributing to stress levels among nurses in a tertiary health institution in Edo state in which "Poor working conditions and lack of resources" had the highest mean score of 2.9, making it the most influential factor contributing to stress among nurses. This was followed by both "Long working hours and shift rotations" and "Emotional strain from patient care responsibilities," each with a mean of 2.8. "Work-life imbalance due to job demands" and "Pressure to meet high job performance expectations" both had a mean score of 2.7, while "Workplace violence and harassment" recorded a mean of 2.5. The lowest ranked item was "Lack of autonomy and decision-making power," with a mean of 2.4. The grand mean of 2.7 indicates that these factors are generally influential in contributing to the stress levels experienced by nurses in the institution.



**Figure 4.3: Pie chart showing the Factors contributing to stress levels among nurses in a tertiary health institution in Edo state**

Figure 4.3 illustrates the factors contributing to stress levels among nurses in a tertiary health institution in Edo State. A majority of the respondents, 158 (59), identified the factors as influential, while 112 (41) considered them non-influential, indicating that most nurses perceive these factors as significant contributors to their stress.

## CHAPTER FIVE

### DISCUSSION OF FINDINGS

This chapter discusses the major findings of the research compared with the literature reviewed, the implication for nursing, summary, conclusion, Recommendations and Suggestions for further Studies.

#### 5.1. Discussion of major Findings

The study discusses the Assessment of the influence of stress on work behaviour among nurses in a tertiary health institution in Edo State. The socio-demographic characteristics of the respondents reveal important patterns that align with and extend findings from previous studies in the field. The gender distribution shows a significant female predominance (85.2%) compared to males (14.8%), which is consistent with the global nursing workforce pattern. This aligns with Olude et al. (2022)'s study, which reported 72.5% female representation among healthcare practitioners in Lagos State. The gender imbalance is particularly relevant as Heliso et al. (2024) found that being female was associated with higher work stress levels. Age distribution indicates a relatively young workforce, with 73.3% of respondents under 40 years (39.6% under 30 years and 33.7% between 30-39 years). This demographic pattern is similar to trends observed in other Nigerian studies, such as Akpor et al. (2023). The predominance of younger nurses may have implications for stress management, as experience levels have been shown to correlate with stress handling capabilities. Educational qualifications show that most nurses hold either a B.Sc (43.3%) or Diploma (34.4%), with fewer having postgraduate qualifications (M.Sc 18.1%, Ph.D 4.1%). This finding is relevant in light of Opoku Agyemang et al. (2022)'s study, which found that educational qualification influenced stress levels, with diploma holders

showing different stress patterns compared to those with advanced degrees. Regarding professional experience, 74% of respondents had 10 years or less experience (36.3% with 1-5 years, 30.7% with 6-10 years), while only 8.5% had 16 or more years of experience. This experience distribution is important considering Akpor et al. (2023)'s findings that years of experience significantly correlated with stress levels ( $r = 0.631$ ,  $p = 0.000$ ). The rank distribution shows a pyramid structure with more junior positions (32.6% Nursing Officers, 24.4% Senior Nursing Officers) than senior positions (10.4% Chief Nursing Officers). This hierarchical structure may influence stress levels, as Olorunfemi & Chika (2024) identified poor leadership support as a significant stressor in Nigerian healthcare settings. Unit experience patterns mirror overall experience trends, with 73.7% having 10 or fewer years in their current unit. This could affect stress levels as unit familiarity and expertise have been shown to influence occupational stress management, as noted in studies like Vu et al. (2021), which found that working in specialized units like emergency and intensive care was associated with higher stress levels. These demographic characteristics provide important context for understanding stress patterns among nurses, particularly considering findings from studies like Sani et al. (2024) and Akinwale et al. (2024) that demonstrate how various demographic factors interact with workplace stressors and influence stress manifestation among nursing professionals.

### **Level of stress among nurses in a tertiary health institution In Edo using the nursing stress scale (NSS)**

The findings shows that 59% of nurses experienced high levels of stress, with a grand mean of 2.8 on the Nursing Stress Scale, indicating overall high stress levels. This finding is consistent with Zhang et al.'s (2022) nationwide study in China, which reported high levels of occupational stress among nurses. Similarly, it aligns with

Werke & Weret's (2023) findings in Ethiopia, where 47.8% of nurses were found to be occupationally stressed, though the percentage in Edo State is notably higher. The specific stressors identified in the current study show that work overload and insufficient staff support (mean=2.9), fear of making mistakes (mean=3.0), and high patient-to-nurse ratio (mean=2.9) were among the highest-rated stressors. This mirrors Al Maqbali et al.'s (2021) meta-analysis findings, which reported a 43% overall prevalence of stress among nurses globally. The current study's findings are particularly comparable to Olude et al.'s (2022) Nigerian study, which found stress to be the most prevalent mental health condition among healthcare workers, with nurses being the most affected group. However, the present study's 59% high-stress prevalence is lower than the stress levels reported by Hemmati et al. (2021) in Iranian nurses (67%), suggesting possible regional or institutional variations in stress experiences. It's noteworthy that while conflict with physicians and other healthcare staff showed a lower mean score (2.4), other interpersonal and professional stressors such as dealing with uncooperative patients or families (mean=2.7) and lack of administrative support (mean=2.7) remained significant concerns. This pattern aligns with Akpor et al.'s (2023) findings in North Central Nigeria, where organizational and interpersonal factors were identified as significant contributors to nurse stress.

The high stress levels identified in this study support the growing body of evidence suggesting that occupational stress among nurses is a significant concern requiring urgent attention, particularly in tertiary healthcare settings

### **Impact of stress on work behavior among nurses in a tertiary health institution in Edo state.**

The findings revealed that 71% of respondents reporting a high impact on their work behavior. This finding warrants detailed discussion in relation to existing literature.

The high prevalence of burnout (mean=3.0) among the respondents aligns with Shah et al.'s (2021) findings in the United States, where 31.5% of nurses reported burnout as a reason for leaving their jobs. Similarly, Ramírez-Elvira et al.'s (2021) meta-analysis found high emotional exhaustion prevalence of 31% among nurses, which corresponds with the current study's findings on emotional exhaustion (mean=2.9). The study reveals that stress significantly affects nurses' concentration and productivity (mean=2.9), supporting Babapour et al.'s (2022) findings of a negative correlation between job stress and care behaviors ( $r=-0.26$ ). This is further reinforced by Hwang & Lee's (2023) research, which demonstrated that higher occupational stress levels significantly reduced work performance. The finding that nurses have considered leaving their jobs due to stress (mean=2.8) corresponds with Jachmann et al.'s (2025) systematic review, which found a significant association between burnout and intentions to quit emergency medicine. This trend is particularly concerning for workforce retention in healthcare settings. The impact on colleague interactions (mean=2.9) and emotional exhaustion (mean=2.9) aligns with Emami et al.'s (2022) research, which found that high levels of perceived job stress were associated with lower levels of nurses' caring behaviors. Similarly, Olorunfemi & Chika's (2024) study reported that occupational stress negatively affected teamwork (65.3% of respondents) and led to aggressive attitudes toward patients (91.3%). The high impact on personal life and well-being (mean=3.0) mirrors findings from Akinwale et al.'s (2024) study, where 38.5% of nurses reported a decline in quality of life due to work-related stress. This comprehensive impact on both professional and personal domains underscores the serious nature of occupational stress in nursing. These findings collectively suggest that stress significantly impacts multiple aspects of nurses' work behavior and personal well-being, potentially compromising both healthcare delivery quality and workforce

sustainability. The consistency between these findings and previous studies indicates a persistent and widespread challenge in the nursing profession that requires targeted interventions.

### **Factors contributing to stress levels among nurses in a tertiary health institution in Edo state**

The findings show that several key factors contribute to stress levels among nurses in the tertiary health institution in Edo state. These findings align with and extend previous research in this area. Poor working conditions and lack of resources emerged as the most significant stressor (mean = 2.9), with 65.9% of respondents rating it as a major or extreme factor. This finding aligns with Okoye et al. (2021), who identified lack of consumables (22.5%) as a primary stressor among nurses in Abuja, Nigeria. Similarly, Akpor et al. (2023) highlighted inadequate staffing and lack of administrative support as major stressors. Long working hours and shift rotations (mean = 2.8) were identified as the second most influential factor, with 66.7% of nurses rating it as a major or extreme stressor. This corresponds with Hrairi et al. (2021)'s findings in Tunisia, where rotating shifts affected 72.5% of nurses, and Heliso et al. (2024)'s study in Ethiopia, which identified rotating shifts as a significant stress factor. Emotional strain from patient care responsibilities (mean = 2.8) was also prominent, with 61.8% rating it as a major or extreme factor. This finding resonates with Vu et al. (2021)'s study in Vietnam, which found that difficulties connected to inadequate emotional preparedness was among the most significant stressors (mean score 1.97). Work-life imbalance and pressure to meet high job performance expectations (both mean = 2.7) were also influential factors. This aligns with Jachmann et al. (2025)'s systematic review, which found that burnout and stress negatively impacted work-life balance and quality of life among healthcare workers.

Workplace violence and harassment (mean = 2.5) and lack of autonomy (mean = 2.4) were rated as relatively less influential but still significant factors. This partially supports Assis et al. (2022)'s findings in Brazil, which identified lack of workplace autonomy as a key stressor. These findings broadly correspond with Olorunfemi & Chika (2024)'s study, which found similar patterns in Nigerian healthcare settings, identifying heavy workload (62.5%), long work hours (48.3%), and poor leadership support (39.2%) as primary stress contributors. The results also align with Akpor et al. (2023)'s research in North Central Nigeria, which emphasized the impact of high workload, inadequate staffing, and lack of administrative support on nurse stress levels. The overall pattern suggests that organizational and structural factors, rather than individual or interpersonal factors, are the primary contributors to nurse stress in this setting. This understanding could be valuable for developing targeted interventions to reduce stress levels among nursing staff.

## **5.2 Implication to nurses**

The findings of this study have several critical implications for nurses working in tertiary healthcare institutions. The high prevalence of stress among nurses, as revealed by the Nursing Stress Scale (NSS), highlights the urgent need for stress management strategies to be integrated into daily nursing practice. The fact that 59% of respondents reported high stress levels indicates that stress is not merely an individual issue but a systemic challenge within the healthcare environment.

Nurses are at the forefront of patient care, and their well-being directly affects the quality of care they provide. High stress levels, as shown in this study, contribute to emotional exhaustion, reduced concentration, burnout, and diminished productivity.

These outcomes not only compromise patient safety but also increase the risk of errors, absenteeism, and staff turnover. Therefore, nurses must be encouraged to recognize the signs of stress early and seek support through counseling, peer support, and institutional mental health services.

Furthermore, the study revealed that younger, less experienced nurses and those in lower professional ranks are more vulnerable to stress. This suggests the need for mentorship programs where senior nurses provide guidance and emotional support to junior staff. Such initiatives could build resilience and improve coping mechanisms among early-career nurses.

The findings also emphasize the importance of self-care and work-life balance. Nurses should be supported in creating boundaries between work and personal life, especially in settings with long shifts and inadequate staffing. Health institutions should consider rotating shifts strategically to reduce fatigue and emotional strain.

Lastly, this study calls on nurses to advocate for systemic changes. Poor working conditions, lack of resources, and insufficient administrative support were major stressors identified. Nurses should be empowered to voice their concerns and participate in policy-making processes that affect their work environment. Only through collaborative effort between nurses, hospital management, and policymakers can sustainable improvements be achieved to safeguard the physical and mental well-being of nursing professionals.

### **5.3 Summary**

The study underscores that stress is a significant issue among nurses in tertiary healthcare institutions, with high levels of occupational stress affecting their performance, emotional well-being, and overall work behavior. Younger and less experienced nurses are particularly vulnerable, pointing to the need for mentorship and support systems. The impact of stress ranging from burnout and reduced productivity to strained interpersonal relationships calls for proactive self-care, improved work-life balance, and institutional mental health support. Furthermore, nurses should be empowered to advocate for better working conditions, adequate staffing, and resource availability, as these organizational factors are primary contributors to stress. Addressing these issues is essential to enhance nurse well-being and ensure the delivery of safe, high-quality patient care.

### **5.4 Conclusion**

This study has provided valuable insights into the influence of stress on work behavior among nurses in a tertiary health institution in Edo State. The findings reveal a high prevalence of occupational stress, with major stressors including poor working conditions, long working hours, emotional strain from patient care, and lack of administrative support. These stressors significantly impact nurses' professional behavior, leading to burnout, decreased productivity, emotional exhaustion, and strained interpersonal relationships in the workplace. Demographic factors such as age, gender, years of experience, and professional rank also play a significant role in determining stress levels, with younger and less experienced nurses being more

susceptible. The evidence suggests that organizational and structural issues, more than personal shortcomings, are the primary drivers of stress in this setting.

Overall, the study highlights the urgent need for comprehensive strategies to manage stress among nurses. These should include institutional reforms to improve working conditions, the establishment of support systems, provision of mental health resources, and policies that promote work-life balance. Addressing these concerns is crucial not only for the well-being of nurses but also for maintaining high standards of patient care and ensuring long-term workforce sustainability in the healthcare sector.

### **5.5 Limitations of study**

Despite the valuable insights provided by this study, certain limitations should be acknowledged. First, the study was conducted in a single tertiary health institution in Edo State, which may limit the generalizability of the findings to other healthcare settings or regions. Second, the cross-sectional design of the study restricts the ability to establish causal relationships between stress and work behavior. Longitudinal studies would be more suitable for examining how stress levels evolve over time and impact nurses' performance. Third, the reliance on self-reported data through structured questionnaires introduces the possibility of response bias, as participants may underreport or overreport their stress levels due to social desirability or recall issues. Additionally, the study did not include qualitative methods such as interviews or focus group discussions, which could have provided deeper insights into the personal experiences and coping strategies of nurses dealing with occupational stress.

Finally, some potentially relevant variables such as personality traits, coping mechanisms, and organizational culture were not explored in depth, which may have further enriched the understanding of stress dynamics in the nursing profession.

## **5.6 Recommendations**

In light of the findings from this study on the influence of stress on work behavior among nurses in a tertiary health institution in Edo State, the following recommendations are proposed:

Hospital management should prioritize creating a conducive work environment by ensuring the availability of adequate resources, safe facilities, and manageable workloads to reduce stress triggers.

Adequate staffing levels should be maintained to reduce work overload and long shift hours. Recruitment of more nurses and equitable distribution across departments can help lower the patient-to-nurse ratio.

Institutions should implement regular mental health awareness campaigns, counseling services, and stress management workshops to support nurses' emotional well-being.

Nurse leaders and hospital administrators should provide stronger support to nursing staff by fostering open communication, acknowledging nurses' contributions, and involving them in decision-making processes.

Continuous professional development opportunities should be provided to enhance nurses' coping skills, resilience, and job satisfaction. Emphasis should also be placed on training for stress identification and self-care.

Government and healthcare policymakers should formulate and enforce policies that promote work-life balance, fair shift scheduling, and protection from workplace violence or harassment.

### **5.7 Suggestion for Further study**

- Future studies should explore the longitudinal impact of occupational stress on nurses' health and job performance over time, to establish causal relationships.
- There is a need for qualitative research to gain deeper insights into the lived experiences of nurses dealing with stress, including their coping strategies and personal narratives.
- Comparative studies can be conducted across multiple healthcare institutions or geographic regions to examine variations in stress levels and their effects on work behavior.
- Further research could examine the role of organizational culture, leadership style, and support systems in mitigating stress among nurses.

## REFERENCES

- Abdoh, D., Shahin, M., Ali, A., Alhejaili, S., Madani Kiram, O., & Al-Dubai, S. A. (2021). Prevalence and associated factors of stress among primary health care nurses in Saudi Arabia: A multi-center study. *Journal of Family Medicine and Primary Care, 10*, 2692-2696.
- Akinwale, O. D., Omishakin, M. Y. J., Abokede, O. O., Ajewole, A. I., Akinbowale, B. T., & Adeniyi, V. A. (2024). Perceived influence of work-related stress on caring behaviour and quality of life of nurses in UNIOSUN teaching hospital, Osogbo Osun state. *Research Journal of Health Sciences, 12*(3), 239-250.
- Akpor, O. A., Aina, V. O., & Akpor, O. B. (2023). Occupational Stress Levels and Coping Strategies among Nurses Working in an Urban Metropolis in North Central Nigeria. *The Open Pain Journal, 16*(1).
- Akpor, O. A., Aina, V. O., & Akpor, O. B. (2023). Occupational Stress Levels and Coping Strategies among Nurses Working in an Urban Metropolis in North Central Nigeria. *The Open Pain Journal, 16*. <https://doi.org/10.2174/18763863-v16-230223-2022-11>
- Al Maqbali, M., Al Sinani, M., & Al-Lenjawi, B. (2021). Prevalence of stress, depression, anxiety and sleep disturbance among nurses during the COVID-19 pandemic: A systematic review and meta-analysis. *Journal of psychosomatic research, 141*, 110343. <https://doi.org/10.1016/j.jpsychores.2020.110343>
- Al Otaibi, S. M., Amin, M., Winterton, J., Bolt, E. E. T., & Cafferkey, K. (2023). The role of empowering leadership and psychological empowerment on nurses' work engagement and affective commitment. *International Journal of Organizational Analysis, 31*(6), 2536-2560.
- AlEssa, H. S., & Durugbo, C. M. (2022). Systematic review of innovative work behavior concepts and contributions. *Management Review Quarterly, 72*(4), 1171-1208.
- AlEssa, H. S., & Durugbo, C. M. (2022). Understanding innovative work behaviour of women in service firms. *Service Business, 16*(4), 825-862.

- Aman-Ullah, A., Aziz, A., Ibrahim, H., Mehmood, W., & Abdullah Abbas, Y. (2022). The impact of job security, job satisfaction and job embeddedness on employee retention: an empirical investigation of Pakistan's health-care industry. *Journal of Asia Business Studies*, 16(6), 904-922.
- Antczak-Komoterska, A., Haor, B., Malinowska, M., Grzelak, L., Biercewicz, M., Kochman, D., Krajewska, K., Filipiska-Blejder, K., Wiśniewski, A., & Ślusarz, R. (2023). Analysis of the Level of Stress and Methods of Coping with Stress among the Nursing Staff. *Nursing Reports*, 13, 1318 - 1330.
- Aqil, M., Tjahjono, H. K., & Prajogo, W. (2023). The Impact of Psychological Contract Breach on Counterproductive Work Behavior Mediated by Organizational Trust and Work Engagement in State Civil Apparatus. *Quality-Access to Success*, 24(194).
- Assis, B. B. D., Azevedo, C., Moura, C. D. C., Mendes, P. G., Rocha, L. L., Roncalli, A. A., ... & Chianca, T. C. M. (2022). Factors associated with stress, anxiety and depression in nursing professionals in the hospital context. *Revista Brasileira de Enfermagem*, 75(Suppl 3), e20210263.
- Assis, B. B. D., Azevedo, C., Moura, C. D. C., Mendes, P. G., Rocha, L. L., Roncalli, A. A., ... & Chianca, T. C. M. (2022). Factors associated with stress, anxiety and depression in nursing professionals in the hospital context. *Revista Brasileira de Enfermagem*, 75(Suppl 3), e20210263.
- Awada, M., Becerik Gerber, B., Lucas, G. M., & Roll, S. C. (2024). Stress appraisal in the workplace and its associations with productivity and mood: Insights from a multimodal machine learning analysis. *PloS one*, 19(1), e0296468.
- Babapour, A. R., Gahassab-Mozaffari, N., & Fathnezhad-Kazemi, A. (2022). Nurses' job stress and its impact on quality of life and caring behaviors: a cross-sectional study. *BMC nursing*, 21(1), 75. <https://doi.org/10.1186/s12912-022-00852-y>
- Babapour, A. R., Gahassab-Mozaffari, N., & Fathnezhad-Kazemi, A. (2022). Nurses' job stress and its impact on quality of life and caring behaviors: a cross-sectional study. *BMC nursing*, 21(1), 75.

- Bakal, S. (2023). Impact of Prolonged working hours, work stress and fatigue among Nurses. *International Journal For Multidisciplinary Research*, 5(2).
- Barak, Y. (2022). Stress, Distress, Tensity, Neuroticism, and Risk of Dementia. *JAMA Network Open*, 5(12), e2247124-e2247124.
- Beck, J. G., Majeed, R., Brown, T. A., Free, B. A. L., Bowen, M. E., Garrett, A. B., ... & Brown, B. S. (2023). Understanding the role of COVID-19–related workplace stress and institutional betrayal on mental health in nurses: Some heroes wear scrubs. *Journal of Traumatic Stress*, 36(2), 421-432.
- Betke, K., Basińska, M. A., & Andruszkiewicz, A. (2021). Sense of coherence and strategies for coping with stress among nurses. *BMC nursing*, 20(1), 107.
- Boitshwarelo, T. (2024). Workplace Stressors and Their Impact on the Nurse Managers Role. *International journal of health sciences*, 8(3), 341-351.
- Boyle, D., & Steinheiser, M. (2021). Emotional Hazards of Nurses' Work. *Journal of Infusion Nursing*, 44, 78 - 93.
- Calhoon, H. E. (2021). *Burnout, Vicarious Trauma, and Utilization of Critical Incident Stress Management Programs for Emergency Service Personnel Following a Critical Incident* (Doctoral dissertation, The Chicago School of Professional Psychology).
- Chinedu-Eleonu, P., Obasi, C., & Nsonwu, M. (2021). Association of Job Stress and Hypertension among Nurses in Imo State, Nigeria. *International Journal of Science and Healthcare Research* 6(3):309-314.
- Correia, A. S., Cardoso, A., & Vale, N. (2023). Oxidative stress in depression: the link with the stress response, neuroinflammation, serotonin, neurogenesis and synaptic plasticity. *Antioxidants*, 12(2), 470.
- Dartey, A. F., Tackie, V., Worna Lotse, C., Dziwornu, E., Affrim, D., & Delanyo Akosua, D. R. (2023). Occupational stress and its effects on nurses at a health facility in Ho Municipality, Ghana. *SAGE Open Nursing*, 9, 23779608231186044.

- De Los Santos, J. A. A., & Labrague, L. J. (2021). Job engagement and satisfaction are associated with nurse caring behaviours: A cross-sectional study. *Journal of nursing management*, 29(7), 2234-2242.
- De Luca Jr, L. A. (2022). A critique on the theory of homeostasis. *Physiology & Behavior*, 247, 113712.
- Devi, K., Hananingrum, P., & Wahyudiono, Y. D. A. (2023). Why Does Work Stress Occur in Nurses. *The Indonesian Journal of Occupational Safety and Health*, 12(1), 95-103.
- Dominic, O. I., Muritala, T. A., Wetsi, S. Y., & Gambo, N. (2024). Workplace Stress and Nurses' Performance of Public Hospitals in Federal Capital Territory, Nigeria. *European Journal of Business and Innovation Research*, 12(4), 7-33.
- Durmuş, A., Ünal, Ö., Türkteviz, H., & Öztürk, Y. E. (2024). The effect of nurses' perceived workplace incivility on their presenteeism and turnover intention: The mediating role of work stress and psychological resilience. *International Nursing Review*, 71(4), 960–968.
- El-Gazar, H. E., Zoromba, M. A., Zakaria, A. M., Abualruz, H., & Abousoliman, A. D. (2022). Effect of humble leadership on proactive work behaviour: The mediating role of psychological empowerment among nurses. *Journal of Nursing Management*, 30(7), 2689-2698.
- Ella, R. E., Agharandu, A. E., Osuchukwu, E., & Samson-Akpan, P. (2021). Occupational Stress and Job Performance Among Nurses in a Teaching Hospital, in South–South, Nigeria. *Int J Cur Res Rev| Vol*, 13(11), 12.
- Emami, P., Boozari Pour, M., Zahednezhad, H., Khanali Mojen, L., & Naseri, V. (2022). Investigating the relationship between workplace stressors and caring behaviours of nursing staff in inpatient wards: A cross-sectional study. *Journal of advanced nursing*, 78(4), 1066–1074. <https://doi.org/10.1111/jan.15080>
- Emami, P., Boozari Pour, M., Zahednezhad, H., Khanali Mojen, L., & Naseri, V. (2022). Investigating the relationship between workplace stressors and caring behaviours of nursing staff in inpatient wards: A cross-sectional study. *Journal of Advanced Nursing*, 78(4), 1066-1074.

- Evli, M., Odek, O., & Savas, M. (2021). The effect of stress level on patient care behavior in nurses. *International Journal of Caring Sciences*, 14(1), 326-336.
- Evli, M., Ödek, Ö., & Savaş, M. (2021). The effect of stress level on patient care behavior in nurses. *International Journal of Caring Sciences*, 14(1).
- Faiz, S., Safdar, S., & Mubarak, N. (2022). Impact of thriving at work on eustress and distress: career growth as mediator. *European Journal of Training and Development*, 46(1/2), 178-193.
- Francis-Edoziuno, C., Abiona, M., & Odetola, T. (2024). Stressors and Coping Measures Among Undergraduate Nursing Students in Western Nigeria. *PAN AFRICA SCIENCE JOURNAL*, 4(02).
- Gelčytė, V., & Mažionienė, A. (2023). Relationships between work stress and job satisfaction among nurses. *Slauga. Mokslas ir praktika*, 4(1 (313)), 1-7. <https://doi.org/10.47458/Slauga.2023.4.1>
- Gelčytė, V., & Mažionienė, A. (2023). Relationships Between Work Stress and Job Satisfaction Among Nurses. *Slauga. Mokslas ir praktika*, 4(1 (313)), 1-7.
- Gray-Toft, P., & Anderson, J. G. (1981). The nursing stress scale: development of an instrument. *Journal of behavioral assessment*, 3, 11-23.
- Hafaz, E. (2022). Impact of collaboration behavior among staff nurses on their quality of work life and job satisfaction. *Egyptian Nursing Journal*, 19, 189 - 199.
- Heliso, A. Z., Babore, G. O., & Ashine, T. M. (2024). Factors Contributing to Work Stress among Nurses in Hadiya Zone's Public Hospitals, Central Ethiopia. *Africa Journal of Nursing and Midwifery*, 26(1), 15-pages.
- Hemmati, F., Sarokhani, M., Abdan, Z., Sarokhani, D., Dehkordi, A. H., & Fakhri, M. (2021). The prevalence of depression, anxiety and stress in nurses working in Iranian hospitals: A systematic review and meta-analysis. *Przegląd epidemiologiczny*, 75(2), 254–262. <https://doi.org/10.32394/pe.75.24>

- Hiestand, S., Forthun, I., Waage, S., Pallesen, S., & Bjorvatn, B. (2023). Associations between excessive fatigue and pain, sleep, mental-health and work factors in Norwegian nurses. *PLoS One*, *18*(4), e0282734. <https://doi.org/10.1371/journal.pone.0282734>
- Hrairi, A., Kchaou, A., Masmoudi, R., Abbas, A., Hammami, K., Masmoudi, M., Masmoudi, J., & Hajjeji, M. (2021). Perceived stress among nurses: A hospital-based study. *European Psychiatry*, *64*(S396).
- Htet, H. Y., Abhichartibutra, K., & Wichaikum, O. A. (2024). Factors predicting proactive work behaviors among nurses: A descriptive predictive study. *International Nursing Review*, *71*(1), 101-107.
- Hwang, S., & Lee, M.S. (2023). Occupational Stress and Work Performance in Nurses. *J-INSTITUTE*.
- Hwang, S., & Lee, M.S. (2023). Occupational Stress and Work Performance in Nurses. *J-INSTITUTE*.
- Jachmann, A., Loser, A., Mettler, A., Exadaktylos, A., Müller, M., & Klingberg, K. (2025). Burnout, Depression, and Stress in Emergency Department Nurses and Physicians and the Impact on Private and Work Life: A Systematic Review. *Journal of the American College of Emergency Physicians open*, *6*(2), 100046. <https://doi.org/10.1016/j.acepjo.2025.100046>
- Javaid, Z. K., Mahmood, K., & Ali, A. A. (2023). Mediating role of mindfulness between quality of life and workplace stress among working women: quality of life and workplace stress among working women. *Journal of Workplace Behavior*, *4*(1), 68-80.
- Kaushik, A., Ravikiran, S. R., Suprasanna, K., Nayak, M. G., Baliga, K., & Acharya, S. D. (2021). Depression, anxiety, stress and workplace stressors among nurses in tertiary health care settings. *Indian Journal of Occupational and Environmental Medicine*, *25*(1), 27-32.
- Kaushik, A., Ravikiran, S., Suprasanna, K., Nayak, M., Baliga, K., & Acharya, S. (2021). Depression, Anxiety, Stress and Workplace Stressors among Nurses in Tertiary Health Care Settings. *Indian Journal of Occupational and Environmental Medicine*, *25*, 27 - 32.

- Kotb Abd Elhamid, S. M., Abd Elrhman, S. M., & Ahmed, F. A. (2023). Work Stress among Nursing Staff and its association to their Organizational Social relations. *Minia Scientific Nursing Journal*, 14(1), 127-134.
- Marcatto, F., Patriarca, E., Bramuzzo, D., Lucci, E., & Filon, F. (2024). Investigating the role of organizational stress in nurses' psychosomatic complaints: Evidence from a study in northeastern Italy. *AIMS Public Health*, 11, 420 - 431.
- Marsden, K., Robertson, I., & Porter, J. (2022). Stressors, manifestations and course of COVID-19 related distress among public sector nurses and midwives during the COVID-19 pandemic first year in Tasmania, Australia. *PLoS ONE*, 17.
- Mathew, S. (2022). 'Burnt Out Lamps': Exploring the Impact of Occupational Stress and Burnout on the Wellbeing of Intensive Care Nurses in a Tertiary Hospital [Master of Philosophy (School of Nursing)]. The University of Notre Dame Australia.
- McCarty, R. (2023). *Stress, Health, and Behavior*. Guilford Publications.
- Mekonen, E. G., Gebrie, M. H., & Jemberie, S. M. (2022). Work-related stress among nurses working in northwest Amhara Referral Hospitals; a burden for hospitals. *International Journal of Africa Nursing Sciences*, 17, 100486. <https://doi.org/10.1016/j.ijans.2022.100486>.
- Muojekwu, E. E. F., Nsc, B., RM, R., Isabu, A. C., & RPHN, P. D. (2023). Factors Influencing Work-Life Balance and the Challenges on the Mental Health of Nurses in Niger Delta University Teaching Hospital, Okolobiri Bayelsa State, Nigeria. *International Journal of Current Science Research and Review Vol 6(3)*.
- Ndubuisi Sunday, F., & Makata Ngozi, E. (2022). Workplace Commitment among Nurses in Edo State Nigeria: A Cross-Sectional Study. *Midwifery*, 5(4), 155-167.
- Norful, A. A., Rosenfeld, A., Schroeder, K., Travers, J. L., & Aliyu, S. (2021). Primary drivers and psychological manifestations of stress in frontline healthcare workforce during the initial COVID-19 outbreak in the United States. *General hospital psychiatry*, 69, 20-26.
- Norful, A., Albloushi, M., Zhao, J., Gao, Y., Castro, J., Palaganas, E., Magsingit, N., Molo, J., Alenazy, B., & Rivera, R. (2024). Modifiable work stress factors and psychological

health risk among nurses working within 13 countries.. *Journal of nursing scholarship : an official publication of Sigma Theta Tau International Honor Society of Nursing.*

- Noushad, S., Ahmed, S., Ansari, B., Saleem, Y., Batool, S. F., & Batool, S. F. (2021). A review of the literature on the impact of acute and chronic stress upon brain waves. *Annals of Psychophysiology*, 8(1), 49-61.
- Nwobodo, E. P., Strukcinskiene, B., Razbadauskas, A., Grigoliene, R., & Agostinis-Sobrinho, C. (2023, October). Stress Management in Healthcare Organizations: The Nigerian Context. *In Healthcare* (Vol. 11, No. 21, p. 2815). MDPI.
- O'Connor, D. B., Thayer, J. F., & Vedhara, K. (2021). Stress and health: A review of psychobiological processes. *Annual review of psychology*, 72(1), 663-688.
- Öğütlü, H., McNicholas, F., & Türkçapar, H. (2021). Stress and burnout in psychiatrists in Turkey during COVID-19 pandemic. *Psychiatria Danubina*, 33(2), 225-230.
- Olorunfemi, O., & Chika, O. (2024). Effect of Occupational Stress on Work Behavior as Perceived by Nurses at Benue State University Teaching Hospital Makurdi. *Indian Journal of Occupational and Environmental Medicine*, 28, 23 - 26.
- Olorunfemi, O., & Chika, O. J. (2024). Effect of Occupational Stress on Work Behavior as Perceived by Nurses at Benue State University Teaching Hospital Makurdi. *Indian journal of occupational and environmental medicine*, 28(1), 23–26. [https://doi.org/10.4103/ijoem.ijoem\\_7\\_23](https://doi.org/10.4103/ijoem.ijoem_7_23)
- Olude, O. A., Odeyemi, K., Kanma-Okafor, O. J., Badru, O. A., Bashir, S. A., Olusegun, J. O., & Atilola, O. (2022). Mental health status of doctors and nurses in a Nigerian tertiary hospital: A COVID-19 experience. *The South African journal of psychiatry : SAJP : the journal of the Society of Psychiatrists of South Africa*, 28, 1904. <https://doi.org/10.4102/sajpspsychiatry.v28i0.1904>
- Onyedika Godfrey Okoye, Oluwole Olayemi Olaomi, Uchenna Elizabeth Okoye, Uduak-Enimose Onaghise. A Cross-sectional Survey of Job Stress Among Nurses Working at National Hospital Trauma Centre, Abuja, Nigeria. *European Journal of Clinical and Biomedical Sciences*. Vol. 7, No. 2, 2021, pp. 27-32. doi: 10.11648/j.ejcbcs.20210702.12

- Opoku Agyemang, S., Ninnoni, J. P., & Enyan, N. I. E. (2022). Prevalence and determinants of depression, anxiety and stress among psychiatric nurses in Ghana: a cross-sectional study. *BMC nursing*, 21(1), 179. <https://doi.org/10.1186/s12912-022-00964-5>
- Özyürek, P., Çevik, C., Kılıç, İ., & Aslan, A. (2021). Effects of day and night shifts on stress, anxiety, quality of life, and oxidative stress parameters in nurses. *Florence Nightingale journal of nursing*, 29(1), 81.
- Panchbhai, R., Lohi, R., Suraj, S., & Babar, V. (2021). Physical and Psychological Health of Nursing Staff During the Pandemic: Effect of Stress. *Indian Journal of Forensic Medicine & Toxicology*, 15(2), 4372-4375.
- Raesi, R., Abbasi, Z., Saghari, S., Bokaie, S., Raei, M., & Hushmandi, K. (2021). Evaluation of factors affecting job stress in nurses caring for COVID-19 patients. *Journal of Marine Medicine*, 3(4), 80-88.
- Ramírez-Elvira, S., Romero-Béjar, J. L., Suleiman-Martos, N., Gómez-Urquiza, J. L., Monsalve-Reyes, C., Cañadas-De la Fuente, G. A., & Albendín-García, L. (2021). Prevalence, Risk Factors and Burnout Levels in Intensive Care Unit Nurses: A Systematic Review and Meta-Analysis. *International journal of environmental research and public health*, 18(21), 11432. <https://doi.org/10.3390/ijerph182111432>
- Ramsey-Haynes, S. (2021). Emotional intelligence and workplace incivility among oncology RNs. *Nursing Management*, 52(10), 10-14.
- Rochette, L., Dogon, G., & Vergely, C. (2023). Stress: Eight Decades after Its Definition by Hans Selye: "Stress Is the Spice of Life". *Brain Sciences*, 13(2), 310.
- Sani, M. M., Jafaru, Y., Ashipala, D. O., & Sahabi, A. K. (2024). Influence of work-related stress on patient safety culture among nurses in a tertiary hospital: a cross-sectional study. *BMC nursing*, 23(1), 81. <https://doi.org/10.1186/s12912-023-01695-x>
- Shah, M. K., Gandrakota, N., Cimiotti, J. P., Ghose, N., Moore, M., & Ali, M. K. (2021). Prevalence of and Factors Associated With Nurse Burnout in the US. *JAMA network open*, 4(2), e2036469. <https://doi.org/10.1001/jamanetworkopen.2020.36469>

- Shama, S. S., & Ahmad, G. M. (2021). The Relationship between Nurse's Innovative Work Behavior and Their Job Satisfaction. *International Journal of Novel Research in Healthcare and Nursing*, 8(1), 596-606.
- Smith, A. (2022). A holistic approach to the well-being of nurses: A combined effects approach. *Advances in Social Science Research Journal*, 9(1), 475-484.
- Tahara, M., Mashizume, Y., & Takahashi, K. (2021). Coping mechanisms: exploring strategies utilized by Japanese healthcare workers to reduce stress and improve mental health during the COVID-19 pandemic. *International journal of environmental research and public health*, 18(1), 131. <https://doi.org/10.3390/ijerph18010131>
- Thanem, T., & Elraz, H. (2022). From stress to resistance: Challenging the capitalist underpinnings of mental unhealth in work and organizations. *International Journal of Management Reviews*, 24(4), 577-598.
- Topolska, K., Fiejdasz, D., & Makowicz, D. (2022). SStress in the everyday life of Polish society. *PANS Krosno*.
- Vu, P. D., Nguyen, T. T., & Le, D. V. (2024). Occupational stress and associated factors among clinical nurses caring for COVID-19 patients in a Vietnamese tertiary hospital. *PloS one*, 19(8), e0309028. <https://doi.org/10.1371/journal.pone.0309028>
- Werke, E. B., & Weret, Z. S. (2023). Occupational stress and associated factors among nurses working at public hospitals of Addis Ababa, Ethiopia, 2022; A hospital based cross-sectional study. *Frontiers in public health*, 11, 1147086. <https://doi.org/10.3389/fpubh.2023.1147086>
- Wolff, M. B., O'Connor, P. J., Wilson, M. G., & Gay, J. L. (2021). Associations between occupational and leisure-time physical activity with employee stress, burnout and well-being among healthcare industry workers. *American Journal of Health Promotion*, 35(7), 957-965.
- World Health Organization. (2023, February 21). Stress. World Health Organization. Retrieved January 1, 2025, from .

Zaghini, F., Biagioli, V., Fiorini, J., Piredda, M., Moons, P., & Sili, A. (2023). Work-related stress, job satisfaction, and quality of work life among cardiovascular nurses in Italy: structural equation modeling. *Applied Nursing Research*, 72, 151703.

Zhang, W., Ma, X., Yu, S., Zhang, X., Mu, Y., Li, Y., ... & Ji, M. (2023). Occupational stress, respect, and the need for psychological counselling in Chinese nurses: a nationwide cross-sectional study. *Public Health*, 225, 72-78.  
<https://doi.org/10.1016/j.puhe.2023.09.003>

**APPENDIX I**  
**FACULTY OF NURSING SCIENCE**  
**COLLEGE OF MEDICAL SCIENCES**  
**UNIVERSITY OF BENIN, BENIN CITY**  
**QUESTIONNAIRE ON THE INFLUENCE OF STRESS ON WORK**  
**BEHAVIOUR AMONG NURSES IN A TERTIARY HEALTH INSTITUTION**  
**IN EDO STATE.**

Dear Respondents,

I am a student at the institution mentioned above, currently conducting research on the topic "**the influence of stress on work behaviour among nurses in a tertiary health institution in edo state**". The purpose of this questionnaire is to gather pertinent information regarding the subject matter. I kindly request that you select the most suitable option from the choices provided below. Please be assured that all information shared will be kept completely confidential. Thank you for your cooperation.

Yours Faithfully,

EKPE BENARD THEOPHILOUS

**INSTRUCTION:**

Please tick as appropriate in all the boxes provided.

Sex: (a) Male [  ] (b) Female [  ]

Age: (a) Less than 30 years [  ] (b) 30-39 years [  ] (c) 40-49 years [  ] (d) 50-59 years [  ] (e) 60 years & above [  ]

Marital status: (a) Single [  ] (b) Married [  ] (c) Divorced [  ] (d) Widowed [  ]

Highest educational qualification in Nursing: (a) Diploma [ ] (b) Bsc [ ] (c) Msc [ ] (d) Phd [ ]

Ethnicity: (a) Bini [ ] (b) Esan [ ] (c) Hausa [ ] (d) Igbo [ ] (e) Yoruba [ ] (f) Others (specify) \_\_\_\_\_

Religion: (a) Christian [ ] (b) Muslim [ ] (c) Others (specify) \_\_\_\_\_

Length of post-qualification nursing experience: (a) Less than 1year [ ] (b) 1–5 years [ ] (c) 6-10years [ ] (d) 11-15years [ ] (e) 16years and above

Length of experience on current hospital unit: (a) Less than 1year [ ] (b) 1–5 years [ ] (c) 6-10years [ ] (d) 11-15years [ ] (e) 16years and above

Rank (position of the nurse): (a) Nursing Officer [ ] (b) Senior Nursing Officer [ ] (c) Principal nursing officer [ ] (d) Assistant Chief Nursing Officer [ ] (e) Chief Nursing Officer [ ] (f) Others \_\_\_\_\_

Unit: Please specify \_\_\_\_\_

**SECTION B: LEVEL OF STRESS AMONG NURSES IN A TERTIARY HEALTH INSTITUTION IN EDO STATE USING THE NURSING STRESS SCALE (NSS)**

**Please indicate how often you experience the following stressors using the scale:**

Questions	Never	Sometimes	Often	Always
Work overload and insufficient staff support				
Dealing with uncooperative patients or families				
Fear of making mistakes that could harm patients				

High patient-to-nurse ratio affecting quality care				
Conflict with physicians and other healthcare staff				
Lack of administrative support and recognition				
Exposure to traumatic events such as patient death				
Uncertainty in handling patient treatments				

**SECTION C: IMPACT OF STRESS ON WORK BEHAVIOR AMONG NURSES IN A TERTIARY HEALTH INSTITUTION IN EDO STATE.**

**Please indicate the extent to which stress affects your work behaviour:**

<b>Questions</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
I experience burnout due to work-related stress				
Stress leads to decreased concentration and productivity				
I have considered leaving my nursing job due to stress				
Workplace stress affects my interaction with colleagues				

I struggle with emotional exhaustion at work				
My job stress affects my personal life and well-being.				

**SECTION D: FACTORS CONTRIBUTING TO STRESS LEVELS AMONG NURSES  
IN A TERTIARY HEALTH INSTITUTION IN EDO STATE**

**Please indicate the factors contributing to your stress using the scale:**

<b>Questions</b>	<b>Not a factor</b>	<b>Minor factor</b>	<b>Major factor</b>	<b>Extreme factor</b>
Long working hours and shift rotations				
Workplace violence and harassment				
Poor working conditions and lack of resources				
Emotional strain from patient care responsibilities				
Work-life imbalance due to job demands				
Lack of autonomy and decision-making power				
Pressure to meet high job performance expectations				

# HEALTH RESEARCH ETHICS COMMITTEE (HREC)

## UNIVERSITY OF BENIN TEACHING HOSPITAL

P.M.B. 1111 BENIN CITY NIGERIA Telephone: 052-600418 Website: ubth.org

**CHIEF MEDICAL DIRECTOR**  
Prof. Darlington E. Obaseki  
E-mail: darlobaseki@gmail.com

**DIRECTOR OF ADMINISTRATION**  
Jim Uwadie, Esq

**CHAIRMAN**  
Prof. (Mrs.) Antoinette N. Ofili



### HREC OFFICE:

Committee email: ubthresearchethics@gmail.com

**Registration Number:**

NHREC-UBTH-HREC/24/12/2022B

**PROTOCOL NUMBER:** ADM/E 22/A/VOL.VII/2025/07

**PROPOSAL TITLE:** "THE INFLUENCE OF STRESS ON WORK BEHAVIOUR AMONG NURSES IN A TERTIARY HEALTH INSTITUTION EDO STATE."

**PRINCIPAL INVESTIGATOR(S):** EKPE BERNARD THEOPHILIS

**DEPARTMENT/INSTITUTION:** DEPARTMENT OF NURSING SCIENCE, SCHOOL OF BASIC MEDICAL SCIENCES UNIVERSITY OF BENIN, BENIN CITY, EDO STATE

**DATE CONSIDERED:** APRIL 25<sup>TH</sup>, 2025

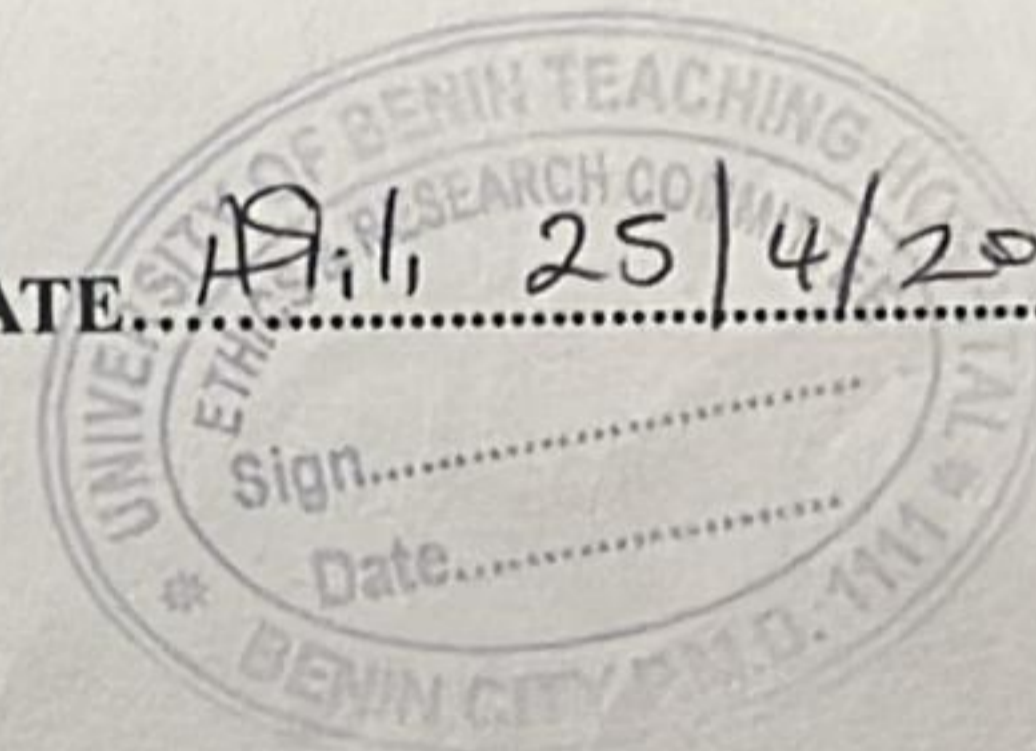
**DECISION OF THE COMMITTEE:** APPROVED

*THIS APPROVAL DATES 25/4/2025 TO 24/4/2026. IF THERE IS DELAY IN STARTING THE RESEARCH, PLEASE INFORM THE HREC SO THAT THE DATES OF APPROVAL CAN BE ADJUSTED ACCORDINGLY*

**REMARK:**

**CHAIRMAN:** PROF. (MRS) A.N. OFILI

**SIGNATURE & DATE:** .....



**SUPERVISOR (S):** MRS. M. A. INIOMOR

**DECLARATION BY INVESTIGATOR(S):**

**PROTOCOL NUMBER** (please quote in all enquiries)

Note that no participant accrual or activity related to this research may be conducted outside of these dates. All informed consent forms used in this study must carry the HREC assigned number and duration of HREC approval of the study. In multiyear research, endeavor to submit your annual re-port to the HREC early in order to obtain renewal of your approval and avoid disruption of your research. No changes are permitted in the research without prior approval by the HREC except in circumstances outlined in the Code. The HREC reserves the right to conduct compliance visit your research site without previous notification

Signature & Date.....



ubthresearchethics@gmail.com

Registration Number: NHREC/24/01/2020