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## **Nurse Relationships, Techniques, and Turnover With Female Nurses in Nigeria**

Judith Obirieze Oparaocha  
*Walden University*

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# Walden University

College of Management and Human Potential

This is to certify that the doctoral study by

Judith Oparaocha

has been found to be complete and satisfactory in all respects, and  
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the review committee has been made.

Review Committee

Dr. Eboni Green, Committee Chairperson, Health Sciences Faculty

Dr. Fawzi Awad, Committee Member, Health Sciences Faculty

Chief Academic Officer and Provost Sue  
Subocz, Ph.D.

Walden University  
2024

Abstract

Nurse Relationships, Techniques, and Turnover With Female Nurses in Nigeria

by

Judith Oparaocha

MSW, Stockton University, 2018

MA, Seton Hall University, 2005

BS, Rutgers University, 2000

Doctoral Study Submitted in Partial Fulfillment of  
the Requirements for the Degree of  
Doctor of Healthcare Administration

Walden University

February 2024

## Abstract

Nurse understaffing relates to reduced quality and safety of care in the healthcare sector, which substantially risks the nation's future health. With issues such as faculty shortage, burnout, increased workload, retirement, and increased turnover, the nursing sector has been unable to sustainably have adequate staffing to satisfy patients' needs. Nurse leaders, directly and indirectly, influence the rate of nurse retention and turnover mainly by affecting the work environment, workload, and staff motivation. Based on the leader member exchange model, this research stipulates that an amicable and supportive relationship between leaders and followers promotes staff retention and increased productivity. The study aims to define how nurse leaders influence nurse turnover and retention rates in the workplace. To achieve this, the research questions explore the leaders' influence on nurses' burnout, turnover, and retention rates. The research design employed in this study is a quantitative method to obtain statistical evidence on the rating of leadership quality and changes in staffing. A correlational design was used to compare nurse leaders' ratings on leadership quality to the staff retention and turnover rate to determine how leadership impacts understaffing. T-tests and thematic analysis were used for quantitative data analysis. The results define the influence of nurse leaders on burnout levels, turnover, and retention rates among nurses. In addition, they provide recommendations on how leaders can play active roles in minimizing burnout and turnover to sustain quality and safe patient care.

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## Dedication

This doctoral study is dedicated first to God Almighty, who provided me with the resources, overall well-being, and spiritual insight needed to realize this great dream. Also, to my precious three daughters, Dr. Chinwe Oparaocha, Nkechi Oparaocha, and Chika Oparaocha, who provided encouragement and support throughout this journey. Their inspiration enabled me to believe in myself and tap into my full potential. My brother, Mr. Hycenth Obirieze, and dear friend and sister, Deaconess Linda Moore, who, despite their busy lives and being miles away, always checked in on my progress and cheered me on to the finish line.

This study is also dedicated to my late beloved daughter, Ugochi Oparaocha, who passed away in 2020, whose health issues over the years inspired me to undertake this scholarly journey. It is her bravery in the face of a challenge that enthused me to seek more understanding on how to improve the healthcare system which was critical for her wellness. Also, to my beloved and ever-present late parents, Mrs. Janet and Evarist Obirieze, who planted the seed of quality education and constantly encouraged me to reach my full potential. Through them, I got to know the importance and true value of good education and, verily, hope that this achievement makes them proud. Lastly, I dedicate this study to the nurses, doctors, and other medical professionals at the Universities of Calabar and Enugu Teaching Hospitals, Nigeria who are the subject of this research and continue to impact their communities' lives positively. In them, I found a passion for investigating this topic.

## Appreciation

My deepest gratitude to God for his continued love. He gave me the grace and resilience to continue at the most trying times even when I almost gave up on this dream, especially after the loss of my beloved daughter in 2020 and my mother, in 2021. It is in His love and promises that I found hope and strength. What a gracious God! My heartfelt appreciation goes to my committee chair, Dr. Eboni Greene, for consistent support, and understanding, and for taking up the responsibility to sail with me to the end when I almost gave up amidst life's trials. Thank you for rebuilding my confidence, the constant reassurance, and not allowing me to sink when the journey got tough. For showing confidence in me and your invaluable assistance, you make this journey a beautiful experience.

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## Section 1: Foundation of the Study and Literature Review

### **Introduction**

The leaders of hospital systems in Nigeria identified the high turnover of female nurses as a depreciating factor affecting healthcare delivery. Female nurses in Nigeria encounter family, social, and financial issues to enter the workforce crippled with corruption resulting in low staff strength within the hospital system (Onwujekwe et al., 2020)

Nigeria has one of the highest numbers of the trained healthcare workforce in Africa, of which nurses constitute the most prominent part (Alabi et al., 2021). However, there is still an inequitable distribution of skilled healthcare workforce across the various levels of healthcare. The disparities in health status and access exist among different population groups in Nigeria, with people living in rural areas due to the inequitable distribution of the healthcare workforce. In addition, individuals requiring specialized care are underserved (Challinor et al., 2020). This issue became a problem because the nursing workforce constitutes most of the country's healthcare workforce. As such, the lack of adequately trained nursing staff may significantly hinder attaining the goals of increased professional efficiency, effectiveness, cost reduction, and patient outcomes across Nigeria's three levels of public healthcare delivery (primary, secondary, and tertiary levels).

Nurses are the most significant workforce group in the healthcare sector and have close contact with patients compared to other healthcare professions (Fasbender et al.,

2021). Unlike before, current research reports indicated that the aging population in the sub-Saharan African countries, more than countries in the developed world, will likely increase at a higher rate in the nearest future with attendance increase' nursing care demands at all levels of healthcare delivery (United Nations. Department of Economic and Social Affairs Population Division, 2017).

Contributing factors to nurse burnout, fatigue, and retention include the population's chronic health conditions that result in an unaddressed healthcare burden in the country (Atella et al., 2019). In addition, the quality of hospital administration and leadership within the healthcare delivery system are implicated in the debate of nurse understaffing by influencing nurse recruitment and retention (Colosi, 2021; Labrague et al., 2020; Michals, 2021).

Nursing and the general healthcare leadership are responsible for developing policies that improve and protect nursing staffing (Eckerson, 2018). Among these roles are the need to establish workplace structures and policies that promote employee wellness and job satisfaction at the organizational level. In addition, leaders are responsible for addressing workplace stressors such as structured and horizontal violence often directed toward nurses. Ineffective management of unprofessional and aggressive behaviors from coworkers and patients significantly elevates job dissatisfaction and the intent to leave among nursing personnel. Majeed and Jamshed (2021) stated that leaders of public hospitals play a crucial role in promoting inter professional collaboration among the healthcare disciplines to enhance concordance and minimize conflicts between the nursing and medical departments - a study to determine job satisfaction among nurses in

two public hospitals in Nigeria that treat general patients, including pediatrics, adults, and older adults, respectively, showed that nursing practice environment, hospital policy, interpersonal relationship, salary, supervision, and work environment, among other factors, were significantly associated with overall job satisfaction (Edoho et al., 2015).

According to Zhang et al. (2020), differences in the recruitment and turnover of nurses in the departments such as pediatrics, med/surgical, orthopedics, and psychiatry may be significant drivers of the nursing staffing rates. Therefore, it is essential to underscore the essentiality of buffering organizations against intentional nurse turnover while optimizing recruitment and retention practices. Nursing leadership is central to these practices by influencing organizational structures and policies. Zhang et al. (2020) also stated that nursing leaders are responsible for improving the quality of the work environment to enhance job satisfaction in the current staff and minimize the intention to leave. Likewise, developing robust organizational cultures enhances traction to quality nursing talents to reduce the likelihood and implications of understaffing in the nursing departments.

To underscore this, a study conducted in Lagos State, Nigeria, explored factors influencing the recruitment and retention of nurses and revealed that despite the concerted effort made by Lagos State Hospital Management Board to recruit and retain nurses (Oyetunde & Ayeni, 2014). The results suggested there is still an insufficient number of nurses to meet the healthcare needs of patients in public hospitals in the state. In addition, the turnover rate of trained nurses was more than the national rate. More than half of the nurses were not sure if they would still be working in their health institutions in the next 5

years, primarily due to a lack of nursing leadership, sense of job security and conducive working environment (Oyetunde & Ayeni, 2014). These data implies the need for solid workforce planning policies to optimize staff retention and recruitment and minimize turnover.

### **Background of the Study**

Female nurses in Nigeria are not doing well with retirement due to the increased burden of care, burnout, and job dissatisfaction that fuel turnover intentions (Al Sabei et al., 2020; Labrague et al., 2020). Due to these challenges, nurse retention in healthcare facilities has reduced, and turnover has increased, creating significant understaffing. In addition, the strained nursing workforce was unable to address the growing population's healthcare demands, which made increased physical and mental pressure among Nigerian female nurses (Brook et al., 2019). Consequently, nurses increased turnover intentions, which creates significant workforce deficits in healthcare organizations (Labrague et al., 2020).

According to Kim and Yi (2019), leadership quality significantly affects employees' satisfaction in healthcare organizations. Eckerson (2018) stated that leaders who develop strategies and programs that strengthen commitment and resilience among new hires increase recruitment and retention, reduce turnover, and maintain a stable workforce level in the facilities. Adams et al. (2019) stated that cultural challenges caused by leaders create significant dissonance among the staff, leading to increased dissatisfaction and turnover intentions. The autocratic and other leadership approaches



that demean employee engagement contribute to emotional and physical burnout, demotivation, and a sense of not being valued and a part of the organization.

Within 2022, the American Nurses Association states that there will be more registered nurse vacancies than in other professions in the United States (Haddad et al., 2022). Between 2020 and 2030, the US Bureau of Labor Statistics estimates that more than 275,000 registered nurses will be needed. Compared to other professions, nursing employment opportunities are expected to rise by 9% by 2026. The American Association of Colleges of Nursing (2020) reported a 5.1% increase in the enrollment rates for entry-level bachelor's degree nurses in 2019. However, this rate is inadequate to meet the predicted demand for nurses, including nursing researchers, educators, and primary care providers. Nursing schools in the United States turned away 80,407 qualified applicants for bachelor's degrees in nursing courses in 2019. The American Association of Colleges of Nursing stated that this challenge relates to the inadequacy of the teaching staff, preceptors, teaching space, and clinical sites. Besides, budget constraints limit the schools' capacity to register and educate more students to add to the current nursing workforce.

The current average age for registered nurses in Nigeria is 50 years indicating that in the next 15 years, the most nursing staff will have retired (Buerhaus, 2021). By 2030, more than 1 million registered nurses are projected to leave the profession, which is expected to cause a significant workforce deficit (Buerhaus, 2021). The dwindling workforce is expected to face a substantial burden of care for the rising number of residents. This impact will be due to the loss of numbers and older nurses' knowledge,

wisdom, and proficiency (Dewanto & Wardhani, 2018). By the year 2030, it is expected that the number of residents aged 65 years and over will rise to 82 million (Buerhaus, 2021). Chronic illnesses and comorbidities in this population group intensify the need for constant care and a larger nursing workforce (Buerhaus, 2021).

### **Problem Statement**

The problem is that nursing leadership practices may increase job dissatisfaction among female nurses in hospitals in Nigeria, reducing nurse retention and increasing nurse turnover, thereby causing understaffing. Job dissatisfaction and the intent to leave are the overall human resource impacts of the workplace condition, which is often manipulated by organizational leadership practices and policies (Zhang et al., 2020). Majeed and Jamshed (2020) identified that understaffing in the nursing department is an issue of urgency, considering discipline's centrality in providing quality and safe care. Even though they have a state-of-the-art system that enhances staff efficiency, nurse turnover still poses the risk of losing highly skilled nursing professionals (Lockhart, 2020).

According to Labrague et al. (2020), emotional exhaustion and organizational culture are implicated in progressive staff turnover. Female nurses in Calabar and Enugu, Nigeria, are often exposed to long working hours, which cause significant physical and emotional fatigue. Nurse turnover and understaffing may form a cycle with dire impacts on patient outcomes at the clinical level. Metcalf et al. (2018) stated that understaffing increases patients' missed care rate. The researchers also identified that building high effective teams enhances staff efficiency and reduces missed care incidences.

## **Purpose of the Study**

This quantitative study aims to examine how nursing leadership techniques impact staffing. The dependent variables in the study are nurse retention levels and burnout. In contrast, the independent variable is leadership technique. This variable encompasses leadership strategies leaders employ at departmental and other levels to steer their teams toward the set mission and vision. Nursing healthcare leadership and administrative practices in public hospitals may significantly influence staff motivation and satisfaction in the workplace (Majeed & Jamshed, 2021). Healthcare organizations can control the Degree of understaffing by influencing the organizational culture and the working environment. Practices such as adequate resource allocation, establishing a supportive workplace culture, preventing bullying and other forms of abuse, optimizing civility and mutual respect, and building a shared vision are related to significant increases in job satisfaction in healthcare organizations (Adams et al., 2019; Kim & Yi, 2019). In addition, transformational and servant leadership practices relate to employee centric policies that strengthen the employees' commitment to the facilities, thus reducing the intent to leave (Zhang et al., 2020). The study may help identify leadership characteristics and practices related to increased nurse retention and turnover. It explores how leadership techniques and methods such as resource provision, engaging employees in decision-making, and promoting collaboration improve the work environment, enhance job satisfaction, and reduce the intent to leave. The findings may help healthcare leaders and organizations implement social changes that bolster nurse retention and lower turnover to protect the quality and safety of patient care. Further, the findings may help facilities

design strategic plans that improve healthcare status, patient experience, and clinician experience.

### **Research Questions and Hypotheses**

RQ1: Is there a correlation between nursing leadership techniques scores and changes in female nurse retention rates, turnover, job satisfaction, a feeling of commitment, and intent to stay amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021?

*H<sub>0</sub>1*: There is no statistically significant correlation between higher scores for nursing leadership techniques and nurse retention levels amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021.

*H<sub>1</sub>1*: A statistically significant correlation exists between higher scores for nursing leadership techniques and nurse retention levels amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021.

RQ2: Is there a correlation between higher scores for nursing leadership techniques, and the rate of nurse burnout, physical exhaustion, dissatisfaction, and intent to leave amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021?

*H<sub>0</sub>2*: There is no statistically significant correlation between higher scores for nursing leadership techniques and the rate of nurse burnout amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021.

*H<sub>12</sub>*: There is a statistically significant correlation between higher scores for nursing leadership techniques and the rate of nurse burnout amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021.

RQ3: Is there a correlation between higher scores for nursing leadership techniques, and the nursing professional techniques amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021?

*H<sub>03</sub>*: There is no statistically significant correlation between higher scores for nursing leadership techniques and the nursing professional techniques amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021.

*H<sub>13</sub>*: There is a statistically significant correlation between higher scores for nursing leadership techniques and the nursing professional techniques amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021.

### **Theoretical Foundation of the Study**

The study's theoretical framework is grounded in Dansereau et al.'s (1975) leader member exchange (LMX) framework, which stipulates that leadership support improves follower satisfaction (Kim & Yi, 2019). This theoretical framework may help rationalize how leaders' practices and relationships with followers affect the work environment. For example, in the nursing context, increasing leadership support to the staff through

improved work conditions, reducing the work burden, and streamlining shifts, among other approaches, can significantly enhance worker satisfaction and productivity. The theory further stipulates that improved relationships between leaders and followers at the organizational level improve contentment and dedication to the organization, promoting retention.

Kim and Yi (2019) stated that LMX substantially enhances inclusivity in nursing departments to foster a sense of inclusion and ownership in the organization. The authors also identified that improved inclusivity due to LMX enhances job satisfaction and staff retention. These findings are supported by Zhang et al. (2020), who articulate that LMX lowers staff burnout and emotional exhaustion by enhancing resource availability, role predictability, and the feeling of meaningfulness among the staff.

LMX theory highlights the influence of nursing leadership on followership and the related impacts on job satisfaction and turnover (Kim & Yi, 2019). The theory defines the direction of the relationship between nurse leaders and followers; and how this affects the intention to stay or leave. At the healthcare level, the department heads' and the organization's actions and beliefs determine resource availability and support reaching the staff.

**Table 1***The LMX Model*

Research question	LMX variables
Is there a correlation between nursing leadership techniques scores and changes in female nurse retention rates, turnover, job satisfaction, a feeling of commitment, and intent to stay amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 - 2021?	<b>Independent variable</b> Scores for nursing leadership techniques <b>Dependent variables</b> Nurse retention, turnover, job satisfaction, a feeling of commitment, intent to stay
Is there a correlation between higher scores for nursing leadership techniques, and the rate of nurse burnout, physical exhaustion, dissatisfaction, and intent to leave amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 - 2021?	<b>Independent variable</b> Scores for nursing leadership techniques <b>Dependent variable</b> Nurse burnout, dissatisfaction, physical exhaustion, and intent to leave.
Is there a correlation between higher scores for nursing leadership techniques, and the nursing professional techniques amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 - 2021	Independent variable Scores for nursing leadership techniques Dependent variable Nursing professional techniques

**Nature of the Study**

The proposed study is quantitative and correlational. An administrator from the human resources department correlated data assessing the quality of nursing leadership with data on nurses' burnout and retention rates obtained from the sampled healthcare organizations. This approach helped compare the relationship between the independent variable; nursing leadership techniques, and the dependent variables; nurses' turnover and retention rates. This research design helped to determine the strength of the causal-effect relationship between the independent and dependent variables to determine the direction

of change. Pospelov et al. (2019) encouraged researchers to use a few research questions to lower the risk of hyperinflation when using this research design. This study calculated Pearson's R and performed t-tests to determine the relationship between nurse turnover, retention rates, and leadership rating.

The proposed study requested data from the human resources departments at two medical hospitals, University Teaching Hospital Calabar and University of Nigeria Teaching Hospital Enugu, in Nigeria on changes in nurse staffing rates. Both facilities are in Nigeria. The study was specifically interested in nurse turnover and retention rates in the last 2 years. Another important dataset was the characterization of nursing leadership skills employed by nurse leaders in the facility. I compared data on Nigeria's nurse leadership skills rating to data obtained on nurse burnout and retention rate changes to make effective and accurate deductions for the study. This comparison helped conclude how leadership skills affect staffing rates.

### **Literature Search Strategy**

The literature search performed in this research involved searches in electronic databases, including the Cochrane Library, EBSCO, PubMed, and Google Scholar. These databases provided access to current and peer-reviewed articles on the relationship between nurse leadership, turnover, and retention. Boolean search strings, including speech marks, brackets, AND, and OR, were used to narrow the search results to only the most relevant ones. Timeline filters were also turned on to retrieve articles published within the last five years (between 2017-2022). Keywords used in the search include *healthcare leadership, nursing leadership techniques, nurse turnover, nurse retention,*



*job satisfaction, job dissatisfaction, intent to stay, feeling of commitment, intent to leave, work environment, burnout, physical exhaustion, intent to leave, and nurse understaffing.*

### **Literature Review Related to Key Variables and Concept**

This literature review includes current research on the nursing shortage, turnover, and retention with leadership practices in healthcare organizations. The theoretical model guiding the study was the LMX model by Dansereau et al. (1975), stipulating that leaders' interactions with employees have a significant influence on job satisfaction, retention, and turnover intentions (Kim & Yi, 2019). According to Alabi et al. (2021), Nigerian nurses have a high burnout rate related to poor quality of life, especially in mental health facilities. The authors state that up to 44.4% of nurses have physical /emotional exhaustion, 31.7% feel depersonalized, and 98.8% feel they have declined individual accomplishment. The literature examined how leaders' practices such as providing resources, scheduling, motivating nurses, building a supportive work environment, and addressing conflicts, affect the nurses' turnover and retention intentions.

### **Nurse Shortage and Recruitment**

According to Lasater et al. (2021), the mean staffing rate in the medical-surgical units ranges between 3.3 to 9.7 clients per nurse. This ratio is substantially higher than the recommended one nurse for every five patients in general hospitals and one nurse for every three patients in teaching hospitals, in addition to a senior nurse (Sharma & Rani, 2020). The decision on the optimal and safe nurse-patient ratio in a facility depends on the category of patients managed in the unit, the nursing staff's experience level, the severity of the patient's needs, and the availability of resources to employ the staff. The

American Nurses Association backs a regulatory approach that empowers nurses to develop staffing ratios specific to individual units to optimize staff efficiency and the experience and satisfaction of the patients and the staff (Sharma & Rani, 2020).

In 2000, Victoria State of Australia became the first region globally to establish guidelines on minimum patient-nurse ratios to equally protect the interests of the care providers and the patients (Sharma & Rani, 2020). The state showed that there should be a maximum of four, five, and eight patients for one nurse during the morning, afternoon, and night shifts. In addition, healthcare facilities were required to have an in-charge nurse to manage the number of patients per nurse based on the patients' needs. In 2004, California became the first state to adopt the minimum/maximum nursing staffing ratio (Anders, 2021). In the ensuing regulations, one nurse was to manage a maximum of five, four, and two patients in the medical-surgical, emergency, and critical care units, respectively. In both instances, the policies improved patient outcomes and reduced burnout and dissatisfaction among nurses (Anders, 2021; Sharma & Rani, 2020).

Suliman et al. (2020) stated that innovative leadership interventions must address nurse understaffing to promote retention and lower turnover rate. These interventions are founded on the backdrop of the increasing workload and strain in the nursing departments. According to Lasater et al. (2020), the occurrence of COVID-19 exposure risks chronic nurse understaffing in the healthcare sector and showed the criticality of effective leadership in addressing this challenge. The authors reported that nurse leaders manage workforce levels and work burdens during the pandemic and ensure adequate workforce protection. Organizations and leaders who failed to provide adequate physical

protection (protective gear) and motivation to the workforce experienced increased distress, anxiety, and turnover as nurses sought better working environments (Falatah, 2021; Mirzaei et al., 2021). Adopting policies that supported nurses, increasing motivation, providing rest time, and enhancing their engagement in clinical decisions maintained substantial stable staffing levels by preventing retention in afflicted facilities (Kim et al., 2020).

### **Background of Nursing Burnout Leading to Current Research on Female Nurses in Nigeria**

Nurse leaders and organizational administration are tasked to set fair employee remuneration scales, including overtime wages (Dewanto & Wardhani, 2018). They directly affect the nurses' individual growth and career development. According to Al Sabei et al. (2020), salary is a major motivating factor as salary is a determining factor for nurse satisfaction and loyalty to the organization. Labrague et al. (2020) stipulated that healthcare financing and the nurses' salaries significantly impact nurse retention and turnover in healthcare institutions, with nurses receiving lower remunerations demonstrating a high turnover rate. The most cited reason for this turnover is the search for better-paying jobs. This argument is expanded by Clochesy et al. (2019), who found out that offering competitive salaries was the most effective approach to recruiting and retaining nurses in healthcare institutions. Notably, salary is often not viewed as a motivating factor. Herzberg's theory postulated salary as a hygiene factor since employees want to be paid fairly, and fair remuneration results in happy and satisfied employees (Clochesy et al., 2019).

The healthcare environment is complex and can be demotivating when the high workload and pressure are not adequately managed (Majeed & Jamshed, 2021; Michas, 2021). Wei et al. (2018) described a healthy workplace as safe, satisfying, and empowering to the workforce. A supportive work environment promotes pride among the employees and encourages their dedication to their roles and the employers. Leaders influence the work environment by providing resources, facilitation, and space for nurses to discharge their duties comfortably and adequately. Lasebikan V.O (2012) identified that the quality of the work environment significantly affects job satisfaction, career development, turnover rates, and the intent to stay or leave.

Forty-four percent (44.4%) of nurses in Nigeria are emotionally exhausted, 31.7% experience depersonalization, and up to 98.8% report declined personal accomplishment (Alabi et al., 2021). Key predictors of burnout include lack of resource support from the management, role conflicts among the staff, and being between 31 and 40 years of age. Further, working in cities and being male increased the risk of emotional/physical exhaustion. According to Ugwu et al. (2020), self-efficacy and role-based stress account for 11.8% of the feeling of dehumanization among nurses, 3.1% of emotional exhaustion, and 35.3% of the declined sense of personal accomplishment.

### **Nurse Turnover and Retention in the Healthcare Sector**

According to Dewanto and Wardhani (2018), the nurse turnover rate globally ranges between 15 and 44%, with variance experienced. The high turnover rate may be related to substantial quality and financial losses in healthcare organizations. According to Lockhart (2020), about 18% of nurses change their professions or jobs within the first

year of employment, and another 33% leave work within two years. The average nurse turnover rate in the United States is 19.1%, with an average of 8% vacant positions. The National Healthcare Retention and Registered Nurse Staffing Report of 2019 showed that hospitals lose an average of \$4.4-6.9 million annually due to turnover (Lockhart, 2020). The average cost of replacing one clinical nurse following turnover ranges between \$40,300 and 64,000.

There are two significant challenges to achieving adequate staffing rates in healthcare facilities after nurse turnover; the inadequate number of trained nurses in the market and the quality of the nurses available (Dewanto & Wardhani, 2018). Healthcare facilities compete against each other to recruit new nurses, and replacing nurses becomes costly and time-consuming (Fasbender et al., 2021). Often, newly hired nurses must undergo orientation and training, and in addition to the time taken to recruit them, the replacement process becomes lengthy (Michas, 2021; Zhang et al., 2018). When inadequately competent nurses are hired, experienced nurses have a higher burden of addressing complex healthcare issues that the newly hired nurses cannot handle. The departure of experienced and highly skilled nurses creates substantial gaps in the organizations, and the remnant nurses must work harder to account for the gap (Oshodi et al., 2019).

Pennington and Driscoll (2019) articulated that organizational instability and lack of administrative support fuel turnover intention among nurses, especially within the first years of employment. A constantly heavy work burden and job pressure increase burnout and are related to a high turnover rate. According to Al Sabeiet al. (2020), nurse burnout

is a compound outcome of the quality of the work environment and leadership support. Masoumi et al. (2020) add that regular motivation from leadership and the provision of adequate resources lower burnout. In addition, understanding the employees' emotions and providing suitable accommodation improves their motivation and commitment to the organization to lower burnout, dissatisfaction, and turnover intentions (Al Sabei et al., 2020; Rai et al., 2019).

### **Leadership Practices and the Work Environment**

Frederick Herzberg's two-factor theory hypothesized that workplace hygiene and motivation are the two critical drivers of employees' job satisfaction (Masoumi et al., 2020). Hygiene factors stipulated in view include the working environment, salary, supervision, organizational policies, and employee interpersonal relations (Rai et al., 2021). Employee-centered policies and regulations are key motivational factors as they develop a supportive culture and protect employees from adverse interactions such as bullying and unmerited dismissals. They offer job security and enhance employees' dedication and commitment. In addition, policies that promote fairness, equality, and justice protect employees from discrimination related to increased turnover (Masoumi et al., 2020; Rai et al., 2021). Leaders are responsible for developing employee-supportive policies that improve relations at the workplace, provide job security, enhance equality, and enhance the employees' dedication to the organization (Kim & Yi, 2019).

Nurse leaders and organizational administration are responsible for setting fair employee remuneration scales, including overtime wages (Dewanto & Wardhani, 2018). Al Sabei et al. (2020) state salary is a major motivating factor. It determines the nurses'

satisfaction and loyalty to the organization since they directly influence the nurses' individual growth and career development. Labrague et al. (2020) stipulated that healthcare financing and the nurses' salaries significantly affect nurse retention and turnover in healthcare institutions, with nurses receiving lower remunerations demonstrating a high turnover rate. The most cited reason for this turnover is the search for better-paying jobs. Clochesy et al. (2019) expanded the argument when they found that offering competitive salaries was the most effective approach to recruiting and retaining nurses in healthcare institutions. Notably, salary is often not viewed as a motivating factor. Herzberg's theory postulated salary as a hygiene factor since employees want to be paid fairly, and fair remuneration results in happy and satisfied employees (Clochesy et al., 2019).

The healthcare environment is complex and can be demotivating when the high workload and pressure are not appropriately managed (Majeed & Jamshed, 2021; Michas, 2021). Wei et al. (2018) described a healthy workplace as safe, satisfying, and empowering to the workforce. A supportive work environment promotes pride among the employees and encourages their dedication to their roles and the employers. Leaders influence the work environment by providing resources, facilitation, and space for nurses to discharge their duties comfortably and adequately. Wei et al. (2018) identified that the quality of the work environment significantly affects job satisfaction, career development, turnover rates, and the intent to stay or leave.

According to Oshodi et al. (2019), the essential of magnetism tool uses eight features to assess the quality of a nursing work environment by its productivity and

satisfaction. These essentials include (1) establishing positive inter-professional relationships within the organization, (2) promoting professional autonomy, (3) having control over the nursing practice, (4) providing consistent leadership support, (5) adequate staffing, (6) promoting a culture of concern to the patients, (7) working with clinically competent nurses, and (8) supporting nurse education (Oshodi et al., 2019). These features characterize magnet healthcare organizations with high nurse retention, low turnover, and optimal job satisfaction.

According to Rai et al. (2021), the key to employee satisfaction is making them believe that their roles are meaningful and valued. Leaders should emphasize the essentiality of the followers' roles in meeting quality outcomes and achieving optimal healthcare for the patients. Another essential practice is sharing stories of success on how the employees contribute to making positive organizational changes, attaining organizational goals, and meeting the corporate vision.

Atella et al. (2019) reported that nurses' work is backbreaking and dissatisfying due to horizontal and vertical nurse-directed violence, such as bullying. Nurses may often face bullying from fellow nurses and other professionals and receive demeaning comments from other professionals. Labrague et al. (2020) further stated that the workers' tasks are often challenging and dissatisfying. Still, leaders must constantly remind them of the essentiality of these tasks in attaining the ultimate objectives. Incivility in the work environment discourages potential talents from joining the organization and discourages the existing workforce from remaining in the organization (Bambi et al., 2018). Incivility



reduces commitment to the organization and creates doubts about the leaders and the organization's commitment to developing an enabling work environment. Bambi et al. (2018) reported that up to 81% and 87.4% of nurse's face bullying and lateral violence. Bullying is a leading cause of burnout, and 10% of nurses who face bullying develop post-traumatic stress disorder.

Further, nurses who are victims of bullying have a 1.5 times higher absenteeism rate and provide services in less than 5 years compared to non-victimized nurses. Therefore, a supportive work environment should be devoid of incivility by discouraging it and enabling nurses and other staff to report instances of bullying. Leaders can address these challenges by establishing transparent chains of communication and open reporting policies (Huang et al., 2022; O'Flynn-Magee et al., 2020).

### **Definitions of Terms**

*Burnout:* Prolonged occupational stress among employees caused by individual, organizational, or other factors leading to emotional fatigue, depersonalization, and declined individual productivity (Buckley et al., 2020).

*Feeling of commitment:* The level of dedication and passion an employee has towards their career or profession. It is also the feeling of responsibility of an employee towards their individual job and organization they work for.

*Intent to leave:* Refers to employees' final decision-making process of leaving their employment (Al Sabei et al., 2020; Rai et al., 2019).

*Intent to stay:* This means employee's willingness or plan to remain in their current employment and they are aware of that decision after a careful consideration.

*Job dissatisfaction:* This refers to when employees do not feel content in their job. This can be due to various professional and personal reasons such as lack of advancement, poor management, limited work-life balance etc. (Al Sabei et al., 2020; Rai et al., 2019).

*Job satisfaction:* The level to which employees are satisfied with their occupations and roles, motivated to maintain, and continue performing in those roles.

*Leadership:* This is the selection, equipping, training, and influencing of followers with diversified capabilities and skills, with the key focus being to achieve the organization's mission and objectives (Reed et al., 2019). Leadership is defined by these key components: leaders, followers, orientation to action, goals, and objectives. This definition shows that leadership is multi-dimensional and requires the recognition of the role of people for its success.

*Leadership techniques:* These are deliberate approaches and techniques leaders employ to influence followers toward mutually understood objectives and the group's or the organization's future (Gandolfi & Stone, 2018). Not all leadership styles lead to better ends since some may cause crises in the organization or among the employees. Often, leadership styles are grounded on leadership theories such as the great man theory, autocratic, servant, laissez-faire, and democratic leadership styles.

*Nursing retention levels:* The nursing staff-to-patient ratio. A high staffing level is where the number of nurses meets or exceeds the recommended nurse-to-patient ratio based on departmental needs. Conversely, a low staffing level is where the number of nurses is lower than the recommended nurse-to-patient ratio based on departmental needs.

*Physical exhaustion:* A state of extreme tiredness or fatigue that can be caused by physical activities or illness. It can also be caused by lack of sleep, poor nutrition, or stress (Ugwu et al., 2020).

*Retention level:* The number of staff currently employed in the organization that remains in the facility annually.

*Strategies:* An approach, method, or technique used in the leadership style of the nurse or other medical professionals.

*Turnover:* The departure of currently employed nursing staff from the organization is caused by factors such as searching for better working conditions, migration, going for higher education, or health issues.

*Understaffing:* A low nurse-to-patient ratio where the number of nurses is inadequate to address patients' healthcare needs sufficiently. Understaffing is related to increased nurse exertion, leading to overworking, fatigue, stress, sleepiness, and burnout.

*Work environment:* The conditions employees work in an organization influence or affect their motivation and productivity. These workplace conditions include the culture and habits developed by leaders and employees.

### **Assumptions**

This study assumes that the two teaching hospitals, A and B in Nigeria, maintain accurate records on nurse turnover and retention rates. The data must be accurate and consistent for the findings to be valid and reliable. Story and Tait (2019) stated that reliability and validity are the two fundamental and essential features of data collected through instruments. Unfortunately, there are no standardized instruments to collect data

on nurse turnover and retention in the facility, so the study assumes that the data collected and stored is accurate and current.

This study also assumes that the two teaching hospitals, A and B in Nigeria, are exposed to similar conditions in addition to nursing leadership techniques. Labrague et al. (2020) stated that nurse turnover and retention are an outcome of several organizational and employee factors, including age, stress levels, income, burnout, and job satisfaction. According to Suliman et al. (2021), leadership controls these factors to lower adverse and optimize positive outcomes. Therefore, this research assumes that the participating organizations were exposed to similar underlying elements to assess the leaders' ability to address these factors and lower their negative influence on staffing levels.

The third assumption is that nurses at the two hospitals, A and B in Nigeria, were provided accurate data regarding the quality of nursing leadership in their organizations. Notably, it is not expected of healthcare facilities to have data on the quality of leadership and its influence on the employees. These data were secondary data obtained from the hospital's administration/human resources based on surveys the hospitals gathered from nurses in the participating facilities. The nurse's feedback could be influenced by their desire to portray a reputable image of their organization in the research, which may affect the findings' validity and reliability. Therefore, this study assumes that the data provided by the hospital administration was honest and a reflection of the nurses' actual experiences with the leadership in the organizations.

## **Scope and Delimitations of the Study**

### **Limitations of the Study**

This study is influenced by reliance on nurses' self-reported ratings of leaders. Essentially, the study collects data from nurses describing the quality of leadership skills and efficiency demonstrated by their leaders in the past year. The respondents are likely to provide positive reviews of their leaders to portray a positive image of the organizations and avoid revealing negative aspects. This likelihood may affect the reliability of the research findings since the study is interested in both positive and negative traits demonstrated by leaders. Controlling this limitation requires that the respondents were guaranteed anonymity and encouraged to provide honest and truthful information to ensure the effectiveness of the research.

The study may also be affected by the limited availability of data on nurse turnover and retention in healthcare facilities in Nigeria. Collecting data background research revealed no recent reliable datasets and publications on changes in nursing staffing rates in the state, significantly affecting the comparison of findings obtained from the target organizations to neighboring facilities. Another limitation is the narrow sample size. The study used a sample of two healthcare facilities in Nigeria. Limited sample sizes hinder the generalizability and applicability of the findings to the more significant Nigerian healthcare sector. The lack of standardized questionnaires on leadership quality is also expected to affect the quality of the results.

### **Significance of the Study**

The study provides in-depth insight into the problem of understaffing in nursing, healthcare's largest workforce. It addresses a long-time challenge in the sector by determining the association between leadership, nursing turnover, and retention (Zhang et al., 2018). Research findings informed healthcare leadership practices and propel the adoption of supportive leadership practices in Nigerian hospitals to strengthen nurse retention and minimize turnover. More specifically, the study unearths leadership practices related to nurse turnover and stressors. Furthermore, it assists sectoral and organizational leaders in understanding the factors that propel hospital staff turnover. The study, hence, will promulgate changes in leadership approaches to lower the risk of turnover and understaffing.

Policy development and changes are central to effective healthcare governance and social change. Evidence from this research inform leadership policy changes at the organizational levels within the two hospitals, A and B, in Nigeria. The organizations will adopt policies that enable leaders and employees to work harmoniously and optimize retention for mutual long-term benefits. If the study results suggest that leadership practices elevate nurse retention, then policies that strengthen these practices may be developed and enforced. On the other hand, if the study reveals that specific leadership practices propel nurse turnover, the organizations may create policies that discourage these practices to safeguard the organization from turnover.

## Summary

The nursing shortage is considered a modern-era crisis in the Nigerian healthcare sector, with nurse turnover being credited for most of this crisis (Brook et al., 2019). With the current shortage of nurses in healthcare centers, nurses and other staff must work long hours and handle increased work burdens that ultimately cause significant physical and mental stress (Labrague et al., 2020). Nurse turnover relates to increased work pressure, professional and personal growth limitations, burnout, and retirement (Dewanto & Wardhani, 2018).

Leadership practices at the organizational level directly affect staffing levels since leaders are responsible for developing and shaping the workplace culture and environment (Eckerson, 2018). Leaders moderate factors that cause turnover and retention to ensure adequate staffing levels that effectively address patients' demands. Organizations that adopt practices that support the employees towards achieving the organization and employees' mutual goals enhance the employees' commitment, increasing retention. This study investigates how leaders affect the workplace's work environment, culture, and social relations. In addition, it addresses practices that leaders can adopt to prevent nurses' intentional and unintentional departure from the workplace.

Ultimately, the findings of this study are intended to promote good governance in healthcare organizations to ensure adequate staffing levels, which are core to establishing and sustaining a healthy population. Effective leadership will also strengthen care quality and safety aspects, thereby enhancing the community's trust in the healthcare system and their willingness to use care. Section1 provided a detailed overview of the sampling

strategy, research tools, study population, and data analysis plan. Section 2 describes the research design and methodology.



## Section 2: Research Design and Data Collection

### **Introduction**

The general objective of the proposed quantitative correlational study was to assess the relationship between nurse leadership techniques and understaffing. Determining this relationship requires the data analysis process to evaluate changes in nurse turnover, retention, and recruitment rates as the key determinants of the staffing level in healthcare organizations. In addition, data on leadership techniques and their quality was obtained from the target organizations for comparison with changes in staffing rates. The research questions for this study inquire about the correlation between nursing leadership techniques scores and changes in female nurse retention rates, turnover, job satisfaction, a feeling of commitment, and intent to stay amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021? (Research Question 1), the correlation between higher scores for nursing leadership techniques, and the rate of nurse burnout, physical exhaustion, dissatisfaction, and intent to leave amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021 (Research Question 2), and the correlation between higher scores for nursing leadership techniques, and the nursing professional techniques amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021 (Research Question 3). This section discusses the research design selected for the study and the rationale for selection. It provides a detailed description of the project methodology, including the sample population, sampling method, instruments, and the

operationalization of constructs. Further, the section describes the data analysis plan and threats to validity that may affect the study's credibility.

### **Research Design and Rationale**

The proposed study used a correlational research design to explore the relationship between nurse staffing rates and leadership techniques without controlling or manipulating the variables. The research design also enables this researcher to predict the direction of the relationship by defining whether it is a positive or negative relationship, as well as the strength of the relationship. Correlational research is like comparative studies but is distinguished by the lack of direct control or manipulation of the independent variables, which is the case in comparative studies. Neither does the researcher control the randomization of either variable into the treatment or control groups or the allocation of interventions. Instead, the researcher identifies the variables and outcomes of interest for evaluation. Like a comparative study, a correlational researcher adopts the objectivist perspective to define, measure, and analyze the variables in consideration of the forecasted outcomes.

Kesmodel (2018) reiterated the essentiality of selecting a suitable correlational research design stressing that the cross-sectional approach is most relevant in epidemiological studies and in assessing knowledge levels and attitudes in the study population. However, there are caveats in this research design rendering it misleading when making causal-effect relationships when it is used for analytical purposes on the relationships between dependent and independent variables. The cause-effect deductions can only be made if the exposure has verified stability over time and, therefore, can be

safely assumed not to be affected by the outcome. In the proposed study, nursing staffing levels and requirements can affect the choice of leadership techniques in health service organizations. Hence, using the cross-sectional correlational research approach for the proposed study could have produced potentially invalid findings and conclusions.

Singh and Cuthbert (2020) suggested that the cohort study approach is more suitable for healthcare research, comparing changes in data over time, such as changes in nurse staffing levels in the proposed research. In this approach, changes in the dependent variables, over time, are assessed and compared to the status quo in another study group or longitudinally before implementing the interventions. In addition, the research compared changes in nurse staffing levels with changes in leadership techniques over time between the selected organizations. This comparison provides a comprehensive identification of the direction and degree of change in nurse staffing levels with changes in leadership techniques.

The selection of the correlational research design is based on three key rationales. One, it allows researchers to explore complex relationships between multiple variables, which, in this case, our staff turnover, retention, and recruitment, and account for staffing changes. Second, the predictor variable in the proposed research, healthcare leadership techniques, cannot be manipulated experimentally. The influence of leadership techniques on nurse understaffing can only be studied from the organizational settings using a longitudinal approach by following changes in staffing data with different leadership techniques. Using the correlational research design enables the researcher to define the relationship between the variables without manipulating the predictor variable.

Third, the correlational study design is suited for studies requiring consistent following of the subject's behavior, such as leadership techniques over time. Finally, the quantitative method is selected based on its reliability in providing reliable statistical analyses that generate concrete evidence of changes.

## **Methodology**

### **Population**

This quantitative study targets health services organizations affected by the nurse “under-staffing crisis”. It involves two teaching hospitals in Nigeria. Both health institutions have nursing departments, which is the study's target. According to data from both hospitals' staff records, the population of nurses is 3,000. This population enabled the researcher to generate the sample size from the population. See the sample size below.

### **Sampling and Sampling Procedures**

Sample selection in healthcare research should minimize the risk of bias to ensure the generalizability of the findings and conclusions to the larger population. Due to the vitality of population healthcare surveys in action strategy planning, investment, and policy implementation, it is essential to protect the quality of the sample (Rodrigues et al., 2021). The random sampling design minimized the risk of bias by ensuring all participants have an equal opportunity to be selected for the study. Studies, however, are still likely to suffer ascertainment bias during data collection and analyses when some (groups of) participants are prioritized over others. This bias is fascinating to the proposed research since the target, health service organizations, have different staffing

levels and data quality that may cause the researcher to have an unintentional and subliminal preference for data from some organizations. Therefore, engaging a few organizations with high-quality data is essential.

The proposed research interests Nigeria's two health services organizations. The availability of the samples depends on the organization's willingness to participate in the study by providing access to organizational data on leadership and staffing rates. Therefore, systematic random sampling is impractical for the proposed research since the selected samples could be annulled by the organization's failure to access their data. Alternatively, purposive sampling of organizations of interest lowers the complexity of the research and enhances the ability to match the sample to the study's aims and objectives. Furthermore, without bias, this sampling design substantially enhances the study's rigor and data integrity. Campbell et al. (2018) described that confirmability, credibility, transferability, and dependability make purposive sampling useful in healthcare research. However, the risk of bias lowers the generalizability of the findings and conclusions.

Cluster sampling lowers study participants' variability and the resource intensiveness of research projects. From a quality perspective, cluster sampling offers the merits of random sampling in minimizing the exposure to bias. Multi-stage selection enables the researcher to systematically narrow the sample size using inclusion and exclusion criteria until the sample's desired size, type, and quality are attained. This sampling technique is ideal for the proposed study since it allows this researcher to identify and select reliable health service organizations from more population of Nigeria.

Using these criteria, the researcher chose healthcare facilities with nursing departments from two university hospitals in the cities of Enugu and Calabar, Nigeria.

Inclusion and exclusion criteria are standard requirements for high-powered research protocols (Patino & Ferreira, 2018). Typically, the inclusion criteria entail the desired geographic, clinical, and demographic characteristics of the study population to answer the research questions. The authors define the exclusion criteria as additional features of the selected population that may interfere with the research process and the expected outcomes. Such features include those that increase the risk of inaccurate data and the likelihood of being unavailable for follow-up.

When establishing the inclusion and exclusion criteria, researchers must consider their effect on the study's external validity (Patino & Ferreira, 2018). The inclusion criteria for the proposed research include health service organizations with nursing departments with staffing levels of or exceeding ten personnel, collecting data on changes in staffing levels, collecting data on changes in leadership in the nursing department, and having data available for the last five years. The exclusion criteria include being unwilling to provide adequate access to the data. In addition, the health service organizations must be in Nigeria and provide direct nursing and other care services to the population.

### **Sample Size and Power Analysis**

G-Power was used for sample calculation and analysis, a process often needed for social and behavioral research. For example, the tool enabled the computation of a sample size required to achieve an 80% effect (Kang, 2021). G-Power helped narrow the

sample size to avoid too large samples that cause a waste of time, resources, effort, and money or too small samples that generate imprecise results. Ethically, too large sample sizes are discouraged to avoid exposing the participants to more inconveniences and risks.

The sample size was derived using the Taro Yamane formula, outlined below:  $n$

$$= \frac{N}{1 + N(e)^2}$$

Where:  $N$  = Population size

$E$  = margin of error (assume 5%)

1 = constant

$$e = 0.05$$

$$n = \frac{3000}{1 + 3000(0.05)^2}$$

$$n = \frac{3000}{1 + 3000(0.0025)}$$

$$n = \frac{3000}{1 + 7.5} \quad n = \frac{3000}{8.5} \quad n =$$

$$352.94 \quad n = 353 \text{ (Approximately)}$$

Three hundred and fifty-three nurses from the University of Calabar Teaching Hospital (UCTH), Cross River, Nigeria, and the University of Nigeria Teaching Hospital (UNTH), Enugu state, Nigeria are the study's sample size. The 353 nurses were selected randomly from the population of 3,000 nurses. Simple random sampling is used to administer the questionnaire to the respondents because it allows for equal opportunity for the respondents to be selected. In addition, the questionnaire was sent to the respondents via email, given the distance constraint. After, the respondents were expected to respond to the questions in the questionnaire and send back their responses to the

researcher via email. I coded the data obtained and used relevant statistical tools to analyze data.

### **Instrumentation and Operationalization of Constructs**

Before the study, authorization was sought from the Walden University Institutional Review Board (IRB). Approval for data collection was also obtained from two teaching hospitals located in Nigeria. Data were obtained from these medical institutions representing the more significant healthcare sector of the regions. Healthcare organizations regularly collect data on staff changes to support decision-making on recruitment, resource allocation, and work burden allocation among the staff.

Understaffing has become a significant crisis in the nursing department, and tracking the recruitment and retention of nurses is of substantial help in maintaining a safe nurse patient ratio. Statista (2021) stated that the average nurse turnover rate in the United States is 18.7%, ranging between 24.4% for step-down nurses and 9.8% for burn center nurses (Michas, 2021). The National Health Care Retention report of 2020 showed that about 62% of hospitals in the United States have 7.5% or more vacancies for registered nurses indicating a dire understaffing crisis (Colosi, 2021). The report further showed that hospitals take between 66 to 126 days to find a replacement for nurses, demonstrating the crucial nature of storing this data (Colosi, 2021).

Leadership practices include leadership styles such as transformational, servant, and democratic approaches to nursing leadership, which significantly influence the working environment. In the proposed research, I assessed the quality of the administration based on employees' ratings using the Likert Scale ranging between 1 -5.



One (1) indicates poor leadership efficiency on this scale, and five (5) demonstrates optimally efficient and highly likable leadership skills. It is, therefore, expected that nurse turnover rates reduce, and retention rates will increase under high-rated leaders.

Approval from the Walden University IRB was necessary to acknowledge the study's adherence to research ethics, legalities, and standards. The proposed study collected data from both UCTH and the UNTH, Enugu, Nigeria for the study. I was provided with the hospital's collected data. However, data use agreements were obtained from the institutions as informed consent to gather and use their information.

In order to quantify this research, three research questions were used in the study. One independent variable, nurse leadership techniques and the following dependent variables: nurse turnover, burnout, retention rates, turnover, job satisfaction, a feeling of commitment, intent to stay, physical exhaustion, dissatisfaction, intent to leave, and nursing professional techniques. The first research question inquired about the relationship between nursing leadership techniques scores and changes in female nurse retention rates, turnover, job satisfaction, a feeling of commitment, and intent to stay amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021 when controlling for the ethnicity, gender, and age of the nurses and the types of facilities. In this research, nurse leadership techniques were described as processes, approaches, and activities utilized by nurse leaders to promote effective working environment that influence the nurses professionally and personally. The dependent variable, nurse turnover, was categorized as a numerical variable.

Research Question 2 inquired about the relationship between higher scores for nursing leadership techniques, and the rate of nurse burnout, physical exhaustion, dissatisfaction, and intent to leave amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 - 2021. Research Question 3 also inquired about the correlation between higher scores for nursing leadership techniques, and the nursing professional techniques amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021.

Nurse leadership techniques and burnout are described as ordinal data/variables and quantified using a Likert scale between 1-5 and reported as a percentage. This study views nurse burnout as prolonged occupational stress among employees caused by individual, organizational, or other factors leading to emotional fatigue, depersonalization, and declined personal productivity.

Leadership quality rating uses a bipolar good to bad scale with the values: 1 (*very poor*), 2 (*poor*), 3 (*average*), 4 (*good*), and 5 (*excellent*). Nurse burnout uses a unipolar frequency scale with the values: 1 (*never*), 2 (*rarely*), 3 (*sometimes*), 4 (*often*), and 5 (*always*). For example, if the respondents demonstrate experiencing burnout four days every week, this would be described as often and therefore assigned a score of 4. Experiencing burnout every day would be interpreted as 'always' and gave a score of 5. The analysis computes these variables' correlations to determine a negative, null, or positive correlation between nurse leadership quality and burnout level.

### **Data Analysis Plan**

The data analysis phase entails three crucial stages, including the preparation of the data, the preliminary phase, and the primary analysis phase. Data preparation first entails data cleansing, recording, selection, and testing (Nisbet et al., 2018). This stage also includes merging, filtering, and aggregating datasets to ease the analysis by statistically rendering the raw data manipulatable. IBM enters the data, which was obtained from the rating of leadership techniques and changes in nursing staffing, into the SPSS (Statistical Package for Social Sciences) software for coding and determination of potential erroneous or missing values in the data cleansing process, which leads to the elimination of any unnecessary and aberrant data. Data testing involves the assessment of the format of the value entries to ensure data accessibility and usability to decision-makers. The preliminary data analysis phase entails testing the parametric assumptions on the shape of the data's distribution. These assumptions include normality, linearity, independence, and homogeneity. The last step is performing data analysis focused on answering the research questions, including testing Pearson's R. The research questions explore the correlation between the quality of nursing leadership and nurse retention, turnover, job satisfaction, a feeling of commitment, intent to stay, and the relationship between the quality of nursing leadership and the rate of nurse burnout, dissatisfaction, physical exhaustion, and intent to leave; the research questions also explore the scores for nursing leadership techniques and nursing professional techniques.

A paired-sample t-test was used to compare the means between the two healthcare organizations on changes in nurse retention rates and the burnout rate among nurses.

Examining organizational data determined trends in staff retention rates and burnout between 2021 and 2022. Comparing the differences in the means of these variables provides a comprehensive understanding of the relationship between nurse leadership, burnout, staff turnover, and staff retention in healthcare organizations in Nigeria.

### **Threats to Validity**

The purpose of threats to validity in this study is to acknowledge any factors that might have undue influence on the research or skew the data being collected. The research sampled two health service organizations, likely affecting the study's validity. Pospelov et al. (2019) have helped researchers to account for the effect of sample size when using the correlational research design. The proposed research utilizes a sample of two health service organizations incorporating nursing departments. Thus, the collected data included the views of multiple leaders and nurses. However, the data likely still affected the validity and generalizability of the findings. Pospelov et al. stipulated that overemphasizing the statistical significance without considering the sample size and composition can significantly affect the reliability of the analysis and findings. To address this challenge, this researcher minimized the risk of bias in the sampling process to maintain validity.

Potential threats to internal validity include the study's respondents' attrition, instrumentation, selection bias during sampling, treatment diffusion, maturation, and history. Controlling the effects of past and development requires that data be collected once and timely to avoid time extensions likely to affect the nature of the data collected.

Using a sample of two healthcare institutions made it unlikely for them to be affected by these factors. Further, the study used a sample of at least ten nurses from each facility to ensure diversity and scale. The Hawthorne effect may affect the external validity of the study. Respondents likely altered their responses since they know their organization is being studied to retain or improve its reputation. The study limits this effect by using an online survey approach and avoids disclosing that the study may show bad leadership in the organizations.

### **Dependent and Independent Variables**

The research explores the influence of leadership quality on staff retention and burnout levels among nurses. The independent variable in the study is scores for nursing leadership techniques. This variable encompasses leadership strategies leaders employ at departmental and other levels to steer their teams toward the set mission and vision. The dependent variables are nurse retention levels, nurse burnout, job satisfaction, a feeling of commitment, intent to stay, dissatisfaction, physical exhaustion, and intent to leave, and nursing professional techniques. These variables are influenced by the qualities of their leaders and their ability to fashion a supportive work environment.

**Table 2***Research Variables*

Research questions	LMX variables
<p><b>Question 1:</b> Is there a correlation between nursing leadership techniques scores and changes in female nurse retention rates, turnover, job satisfaction, a feeling of commitment, and intent to stay amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 - 2021?</p>	<p><b>Independent variable</b> Scores for nursing leadership techniques</p> <p><b>Dependent variables</b> Nurse retention, turnover, job satisfaction, a feeling of commitment, intent to stay</p>
<p><b>Question 2:</b> Is there a correlation between higher scores for nursing leadership techniques, and the rate of nurse burnout, physical exhaustion, dissatisfaction, and intent to leave amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 - 2021?</p>	<p><b>Independent variable</b> Scores for nursing leadership techniques</p> <p><b>Dependent variables</b> Nurse burnout, dissatisfaction, physical exhaustion, and intent to leave.</p>
<p><b>Question 3:</b> Is there a correlation between higher scores for nursing leadership techniques, and the nursing professional techniques amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 - 2021?</p>	<p><b>Independent variable</b> Scores for nursing leadership techniques</p> <p><b>Dependent variables</b> The nursing professional techniques</p>

Note: All the variables are measured using Likert scale and composite scores from the questionnaires

### **Ethical Procedures**

Informed consent from participants is a major ethical consideration in healthcare research. The participating healthcare organizations provided their consent allowing the collection and utilization of data from the facilities (Chen et al., 2020). To obtain this consent, the researcher informed the organizations, in writing, the purpose of the study and data to be collected and guaranteed that the information will only be used for the

study. Another requirement for informed consent was allowing the participants to opt from the study when they believe their needs or values are unmet. Another ethical procedure is masking the identity of the participating organizations to protect their privacy and confidentiality (Lo et al., 2019). Achieving this goal requires that the organizations' names was not revealed to the public during the study's publication after completion.

Confidentiality was also accorded to the respondents participating in the study within their organizations. When requesting feedback through questionnaires, the researcher ensured optimal respect for the participants' values, beliefs, and dignity. Additionally, the research ensured that the data collected does not breach the ethics of privacy and confidentiality of the participants. Lastly, the Walden University research department also evaluated the study to determine whether it adheres to healthcare research ethical standards (Lapid et al., 2019) and authorized the study. Institutional approval and authorization ensured that research projects respect human dignity and other ethical and legal expectations.

### **Summary**

Because researchers have not thoroughly studied this topic, a gap must be addressed. This was the basis for my interest in the topic. The study utilized the quantitative research design, allowing researchers to generate quantifiable, hence verifiable, and reliable data. This method allowed for accurate estimations of the causaleffect relationship between leadership techniques, burnout, and staff retention. Data analysis involved t-tests to assess the reliability and validity of the study findings. Issues

expected to affect the validity of the results include sampling bias, participant attrition, and the Hawthorne effect, which was minimized by using a random sampling design to obtain a representative sample and taking just enough time for data collection to avoid attrition. Utilizing the data collection approach enhanced the accessibility of the participants and reduced the Hawthorne effect. Section 3 describes and analyzes the data collected. It describes the findings and provides graphical presentations on the relationship between nurse leadership, nurse burnout, and nurse retention.



### Section 3: Presentation of Results and Findings

#### **Introduction**

The purpose of this study was to examine the relationship between nurse leadership techniques on nurse' job satisfaction, organizational commitment, turnover rate, intent to stay, and burnout levels. This investigation is aimed at promoting leadership competence among nurse leaders in their ability to establish healthy working relationships and navigating complex human resources issues at the workplace. The population sampled in this study included female nurses in Nigerian healthcare organizations. The study addressed the following research question and the associated hypotheses:

RQ1: Is there a correlation between nursing leadership techniques scores and changes in female nurse retention rates, turnover, job satisfaction, a feeling of commitment, and intent to stay amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021?

$H_01$ : There is no statistically significant correlation between higher scores for nursing leadership techniques and nurse retention levels amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021.

$H_11$ : A statistically significant correlation exists between higher scores for nursing leadership techniques and nurse retention levels amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021.

RQ2: Is there a correlation between higher scores for nursing leadership techniques, and the rate of nurse burnout, physical exhaustion, dissatisfaction, and intent

to leave amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021?

*H<sub>0</sub>2*: There is no statistically significant correlation between higher scores for nursing leadership techniques and the rate of nurse burnout amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021.

*H<sub>1</sub>2*: There is a statistically significant correlation between higher scores for nursing leadership techniques and the rate of nurse burnout amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021.

RQ3: Is there a correlation between higher scores for nursing leadership techniques and the nursing professional techniques amongst public hospitals within the cities of Calabar and Enugu, Nigeria, between 2019 and 2021?

*H<sub>0</sub>3*: There is no statistically significant correlation between higher scores for nursing leadership techniques and the nursing professional techniques amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021.

*H<sub>1</sub>3*: There is a statistically significant correlation between higher scores for nursing leadership techniques and nursing professional techniques amongst public hospitals within the cities of Calabar and Enugu, Nigeria, between 2019 and 2021.

In this section, the findings obtained from the analysis of secondary data obtained from the UCTH and University Teaching Hospital Enugu, Nigeria, are presented. First, a description of the data collection approaches is provided. Secondly, the results, including

the descriptive statistics and the outcome of the hypothesis testing, are described. Finally, the summary of Section 3 is provided.

### **Data Collection of Secondary Data Set**

The data set includes the socio-demographic and career characteristics of female nurses in UCTH, Calabar and UNTH, Enugu, Nigeria, as shown in Table 3. Also, the research questions were addressed using a Pearson's product-moment correlation coefficient as shown in Figures 1 and 2. The data were obtained from UCTH, Calabar and UNTH, Enugu, Nigeria. The key variables included in the data set are the sociodemographic and career characteristics of female nurses in both institutions as well as the responses to the research questions and data analysis using a Pearson's product-moment correlation coefficient.

The purpose of this section is presentation of results obtained from UCTH, Calabar and UNTH, Enugu, Nigeria. A total of 353 female nurses engaged in UCTH and UNTH were selected into this study. The research questions are already captured above. The presentation of the result and findings of the study are analyzed below.

### **Data Collection Process**

The first step in the data collection process was acquiring the dataset from the UCTH, Calabar, and UNTH, Enugu, Nigeria. These data sets were sourced from the 2019 annual staff evaluation datasets in the facilities. The second step involved sorting through the data for comprehensiveness and relevance to this study based on the research questions and hypotheses. Data on leadership techniques, job satisfaction, burnout levels, retention rates, intent to leave, turnover rate, and job commitment among nurses was

included in the study. Data related to other professional groups including physicians and pharmacists was excluded from the study. The third step, then, included compiling the data to facilitate smooth analysis.

### Sample Characteristics

**Table 3**

*Socio-Demographic and Career Characteristics of Female Nurses in UCTH, Calabar, and ENTH, Enugu, Nigeria (n=353)*

Variables	Frequency	Percentages (%)
<b>Age group</b> 21		
– 30	32	9.1
31 – 40	145	41.1
41 – 50	113	32.0
51 – 60	63	17.8
<b>Marital status</b>		
Married	307	87.0
Single	25	7.1
Widowed	18	5.1
Divorced/separated	3	0.8
<b>Cadre</b>		
Junior nursing staff	46	13.0
Senior nursing staff	261	74.0
Management staff	46	13.0
<b>Educational level</b>		
Certificate	32	9.1
Diploma	56	15.9
Degree	219	62.0
Postgraduate degree	46	13.0

Source: Survey from UCTH, Calabar and UNTH, Enugu, Nigeria /Author's Computation, 2023.

The above Table 3 shows the socio-demographic and career characteristics of female nurses in UCTH, Calabar and UNTH, Enugu, Nigeria. The demographics captures some key variables such as age, marital status, cadre, and educational level of the female

Nurses. See table above.

### **Age of Participants**

The mean age of participants was  $42.19 \pm 8.31$  years, with an age range of 27 to 60 years. The age brackets of the female nurses are 21-30, 31-40, 41-50, and 51-60 years of age. Nine-point one percent (N. 32) of the nurses fall within the 21-30 years of age bracket, 41.1% (N. 145) of the female nurses are 31-40 years old, 32.0% (N. 113) are 41-50 years, and 17.8% (N. 63) are 51-60 years old. These findings show that the majority of the female nurses who took part in the exercise are relatively young, between 31-50 years of age.

### **Marital Status**

The survey findings revealed that 87.0% (N. 307) of female nurses in the organizations are married and 7.1% (N. 25) are single. The widowed among them are 18 female nurses representing 5.1% of the sampled size, while 3 (0.8%) of the female nurses are divorced/separated. This implies that most of the female nurses who took part in the exercise are married.

### **Nursing Staff Position**

On the cadre of the female nursing staff, the findings revealed that 46 female nurses, representing 13.0% of the respondents, are junior nursing staff, while 261 (74.0%) of them are senior nursing staff. 46 (13%) of them are management staff. These findings suggest that the majority of participants were female senior staff nurses.

### **Educational Levels**

Nine-point one percent (9.1%) of the participants (N. 32) of the female nurses have certificate-level nursing education, 56 (15.9%) have diplomas, 219 (62.0%) have nursing degrees, and the remaining 46 (13.0%) have postgraduate degrees. This implies that the majority of the female nurse participants had at least a degree-level education attainment.

### **Years of Practice**

As shown in Table 3, the average number of years put into nursing practice was  $15.62 \pm 8.19$ , and most of the female nurses (73.0%) belonged to the age groups 31–40 and 41–50 years. Most of them (87.0%) were married, and three-quarters were in the senior nursing staff cadre, with a few of them either in the junior nursing staff cadre (13.0%) or management levels (13.0%). Also, most of the female nurses (75.0%) had at least a first-degree qualification.

## **Discussion of Findings**

### **Research Question 1: Nurse Leadership and Retention Rates**

RQ1: What is the relationship between nursing leadership and retention rates?

$H_01$ : There is no statistically significant correlation between higher scores for nursing leadership technique scores and nurse retention levels among public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021?

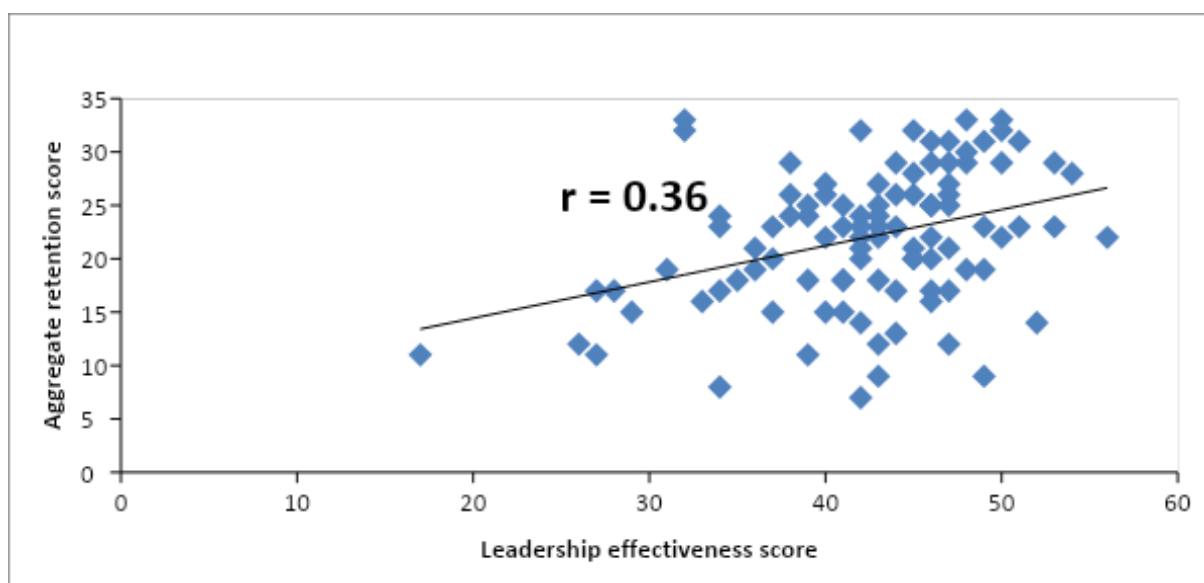
$H_11$ : A statistically significant correlation exists between higher scores for nursing leadership techniques and nurse retention levels among public hospital within the cities of Calabar and Enugu, Nigeria between 2019 and 2021?

***Findings***

The relationship between nursing leadership (as measured by leadership effectiveness score) and nurse retention level among nurses (as measured by aggregate retention score) was explored using a Pearson product-moment correlation coefficient as shown in Figure 1 below. The result suggested that there was a moderate/weak positive correlation between nursing leadership and nurse retention levels ( $r = 0.36$ ,  $p < 0.001$ ) with high level of nurse leadership effectiveness associated with higher levels of nurse retention. The probability value revealed that there is a significant relationship between nursing leadership (as measured by leadership effectiveness score) and nurse retention level among nurses (as measured by aggregate retention score). Decision Rule: therefore, the Null hypothesis ( $H_0$ ) is rejected, and the Alternative is accepted hypothesis ( $H_1$ ) and concludes that our result supports the alternative hypothesis. See Figure 1.

**Figure 1**

Relationship Between Nursing Leadership and Retention Levels Among Female Nurses in UCTH, Calabar and UNTH, Enugu, Nigeria



### Research Question 2: Nurse Leaders and Work-Related Stress

RQ2: What is the relationship between nursing leadership and work-related stress (burnout)?

$H_{02}$ : There is no statistically significant correlation between higher scores for nursing leadership techniques and the rate of nurse burnout amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 - 2021.

$H_{12}$ : There is a statistically significant correlation between higher scores for nursing leadership techniques and the rate of nurse burnout amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 - 2021.

### Findings

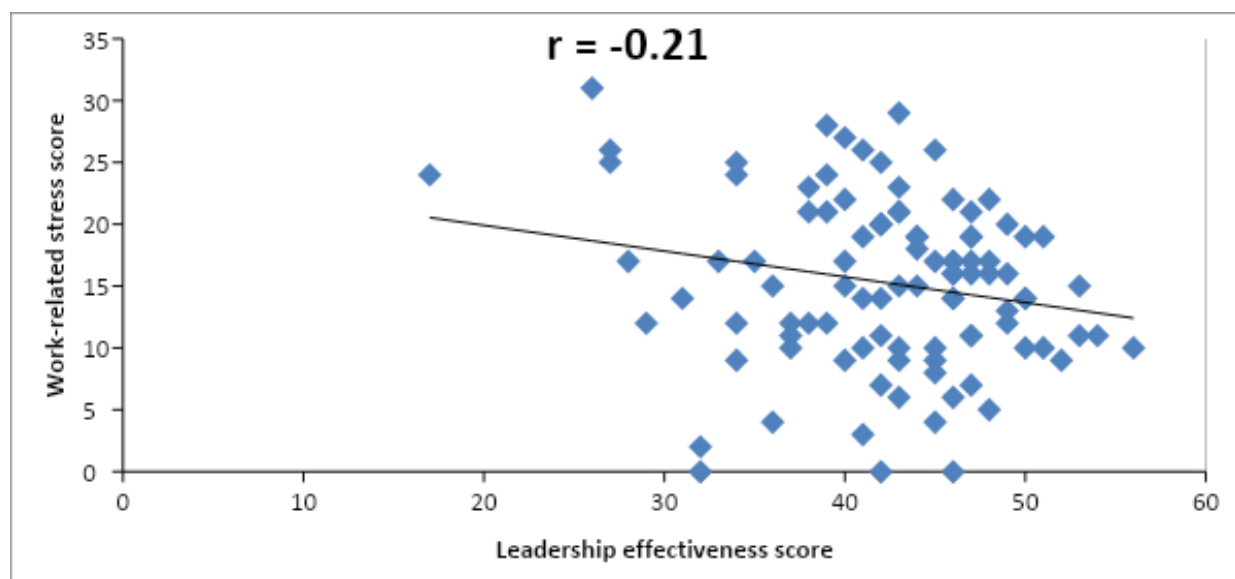
The relationship between nursing leadership (as measured by leadership effectiveness score) and nurse burnout among nurses (as measured by work-related stress score) was explored by carrying out using a Pearson product- moment correlation



coefficient as shown in Figure 2 below. The result showed that there was a weak negative correlation between nursing leadership and burn-out levels ( $r = -0.21$ ,  $p = 0.040$ ) with high level of nurse leadership effectiveness associated with lower levels of burn-out or work-related stress. The probability value revealed that there was significant relationship between nursing leadership (as measured by leadership effectiveness score) and nurse burnout (as measured by work-related stress score). This suggests that quality leadership lowers nurse burnout. The decision rule is based on the fact that the probability value attached to the result obtained is less than 0.05. I rejected the null hypothesis ( $H_0$ ) and accept alternative hypothesis ( $H_1$ ) and conclude that our result is in line with the alternative hypothesis. Figure 2 below captures the graphical illustration.

### Figure 2

Relationship Between Nursing Leadership and Burn-Out (Work-Related Stress) Among Female Nurses in UCTH, Calabar and UNTH, Enugu, Nigeria



**Research Question 3: Nurse Leadership Techniques and Nursing Professional Techniques**

RQ3: Is there a correlation between higher scores for nursing leadership techniques, and the nursing professional techniques amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021?

*H<sub>03</sub>*: There is no statistically significant correlation between higher scores for nursing leadership techniques and the nursing professional techniques amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021.

*H<sub>13</sub>*: There is a statistically significant correlation between higher scores for nursing leadership techniques and the nursing professional techniques amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021.

***Findings***

The data obtained from this research process was insufficient to conduct a comprehensive analysis and generate informative and accurate findings on this research question. The data obtained predominantly focused on the rate of burnout, retention, job satisfaction, the intent to stay, and organizational commitment which addressed the first and second research questions.

### **Summary of Results**

From research question one, result showed that there was a moderate/weak positive correlation between nursing leadership and nurse retention levels ( $r = 0.36$ ,  $p < 0.001$ ) with high level of nurse leadership effectiveness associated with higher levels of nurse retention. The probability value further revealed that there is a significant relationship between nursing leadership (as measured by leadership effectiveness score) and nurse retention level among nurses (as measured by aggregate retention score). In line with the above result, I rejected the Null hypothesis ( $H_0$ ) and accept Alternative hypothesis ( $H_1$ ) and conclude that our result supported the alternative hypothesis.

On research question two, the findings revealed that there was a weak negative correlation between nursing leadership and burn-out levels ( $r = -0.21$ ,  $p = 0.040$ ) with high level of nurse leadership effectiveness associated with lower levels of burnout or work-related stress. The probability value further showed that there was significant relationship between nursing leadership (as measured by leadership effectiveness score) and nurse burn-out among nurses (as measured by work-related stress score). It implies we should reject null hypothesis ( $H_0$ ) and accept alternative hypothesis ( $H_1$ ) and conclude that our result is in line with the alternative hypothesis.

### **Chapter Summary**

This chapter provided a comprehensive analysis of the research findings, identifying a weak negative correlation between nurse leadership and burnout levels and a weak positive correlation between nurse leadership and retention rates. This data shows that high-quality leadership, as indicated by higher ratings of leadership techniques,

increases nurses' job satisfaction, retention, intent of stay, and organizational commitment (RQ1). It further indicates that good leadership lowers the burnout rate (RQ2). This is related to RQ1 in that it improves job satisfaction and retention levels, which are inversely related to burnout. The next chapter expounds on the result's implications to social change and application in practice. It also evaluates the limitations that affected the current study and provides recommendations to overcome these barriers in future research.

#### Section 4: Interpretation of Findings

##### **Introduction**

The purpose of the study was to examine nurse relationships, techniques, and turnover with female Nurses at UCTH, Calabar and UNTH, Enugu, Nigeria. In this chapter, I present an interpretation of the findings of the study to provide the readers an understanding of its connotations and implications on the study variables. The findings show that 353 nurses participated in this study. There was a moderate positive correlation ( $r = 0.36, p < 0.001$ ) between nursing leadership and nurse retention levels and a weak negative correlation ( $r = -0.21, p = 0.040$ ) between nursing leadership and burn-out levels. Chapter 4 also addresses the limitations of the study and recommendations for future research identifying potential research gaps on this area of study. Other components addressed in this chapter include implications of the findings to social change and their application in professional practice.

### **Interpretation of Findings**

This study was grounded on Dansereau et al.'s (1975) LMX framework, which stipulates that leadership support improves follower satisfaction (Kim & Yi, 2019). More intently, this theory narrates the process of establishing long-lasting and perpetual leadership-follower connections based on mutual respect and trust. This high-quality leader-member relationship facilitates and supports effective communication and information-sharing (exchange) that promotes the followers' well-being, productivity, efficiency, and efficaciousness at personal and professional levels. In nursing, job performance, satisfaction, productivity, intention to stay, and retention are strongly anchored on the leadership quality, including the techniques they utilize to navigate the team environment in pursuit for the overall vision. Based on the LMX theory, it is imperative for leaders to employ and maintain leadership techniques that empower the staff to attain these results. Indeed, Wong et al. (2020) showed that authentic leadership techniques promote emotional wellness and job satisfaction. Such leadership techniques also promote efficient recruitment and retention of quality nursing talents that can adequately meet the needs of the patients. These sentiments are reflected in the study which shows a positive correlation between nurse leadership techniques and the nurse outcomes of job satisfaction and retention.

The findings of the study suggest that there is a relatively weak correlation ( $r=0.36$ ) between leadership techniques and nurse retention levels, job commitment and satisfaction, and the intent to stay in relation to research question one. The findings supported the alternative hypothesis ( $RQ_1 H_{20}$ ) that a statistically significant correlation

exists between higher scores for nursing leadership techniques and nurse retention levels among public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021. Despite the weak correlation, these results highlight the influence of quality nurse leadership on nurse staff's outcomes including job satisfaction, commitment, intent to stay, and retention rates. These findings resonate with Specchia et al. (2021), who identified a strong correlation between leadership style, technique, and job satisfaction among nurses.

The choice of leadership style, and hence technique, highly predicts the level of job satisfaction among the staff which, then, influences their commitment to the organization, intent to stay, and retention rates. Employee commitment to the organization and ownership of the organizational goals and vision are key determinants of their job performance and productivity within the facilities. Higher job commitment enhances service delivery to patients and collaboration with other departments, enabling organizations to optimize their outputs in relation to their quarterly, yearly, and long-term goals. In an assessment of the facilitating role of employee wellness, satisfaction, and commitment to organizational outcomes Abdullah et al. (2021) showed that employees maintain long working contracts and high-level productivity when the leadership provides continued empowerment. These results support the study's findings, supporting the opinion that quality leadership techniques can substantially improve organizational productivity by promoting job satisfaction, commitment, and retention in the nursing staff.

In Research Question 2, the study findings support the alternative hypothesis that there was a statistically significant correlation between higher scores for nursing leadership techniques and the rate of nurse burnout amongst public hospitals within the cities of Calabar and Enugu, Nigeria between 2019 and 2021. The findings showed a weak negative correlation ( $r=-0.21$ ) between nurse leadership techniques and nurse burnout. This implies that poor leadership techniques may elevate the rate of burnout among nurses while supportive leadership can substantially reduce the rate of burnout.

In the leader-member exchange theory, poor leadership damages the leader-follower relationships, and this sabotages the organization's pursuit of the strategic plan, goals, and vision. While the 'poor' quality of leadership is subjective to the followers' needs and individual opinions, techniques such as lack of timely and effective communication, integrity, listenership, presence, and micromanagement depict unintentional leadership. Further, setting unrealistic expectations and not promoting accountability sets the team and organization to failure by causing adverse staff outcomes including burnout. In the modern healthcare organizational setting, nursing departments are grappling with increased healthcare demand from the communities notwithstanding the chronic nurse and physician shortage that strains human resources in these departments. Setting high expectations, not providing adequate resource support, not supporting the employees morally, and allowing conflicts to prevail can substantially increase the burnout rate among nurses in the clinical setting.

The negative correlation between nurse leadership techniques and burnout levels identified in the findings depicts the essentiality of identifying retrogressive leadership

techniques that may impair productivity in healthcare organizations. The nursing department and organizational leaders, therefore, ought to establish regular assessments of leadership quality and performance in relation to employee needs and expectations. The outcomes of these appraisals provide quality guidance on leadership improvement to boost employee satisfaction and shield them from burnout.

### **Limitations of the Study**

The sample size was a major limiting factor in the study since it was conducted on two sites: the UCTH, Cross River state, and the UNTH, Enugu state. Despite these samples providing access to a statistically significant 353 nurses, it is worth noting that limitation to these two sites increased homogeneity of the study sample and lowered their diversity. Further, the facilities were selected from two different states, an approach that was aimed to enhance the sample's representativeness. However, this lowers the generalizability of the findings to either of the two states. Therefore, the findings may not adequately reflect the actual situation on the influence of leadership techniques on nurse job satisfaction, retention, and burnout rates.

The research design also limited the study's expansiveness in acquiring qualitative data to support the respondents' opinions. It is noteworthy that the independent and dependent variables studied in this research are qualitative in nature and required to be quantified prior to the initiation of the investigation. Despite being an excellent research design in healthcare and management studies, the quantitative research design provides a dominantly numerical picture of the results, denying the researcher and the audience in-depth and much needed insights into the motivations, drivers, and thoughts of the



respondents which are critical in establishing context. This is especially important for nurse managers and leaders who depend on this information to establish trust and mutuality with their followers. It is important, therefore, for future researchers to consider using a mixed-method design to obtain data on not only the relationship between leadership techniques and nurse outcomes but also the underlying factors such as the working environment and reimbursement.

Data accessibility limited this study's reach and its ability to answer research question 3. Importantly, data available focused on nurse leadership techniques and nurse retention rates, intent to stay, burnout level, job satisfaction, and organizational commitment. Data limitations lowered the comprehensiveness of the study and, hence, it's informativeness to the audience.

### **Application to Professional Practice**

Nurse leadership can greatly influence the activities of health care services at UCTH, Calabar and UNTH, Enugu, Nigeria because of their management role, especially at the unit level. Findings showed that the nursing leadership role has rapidly evolved into a position with greater authority and responsibility. The role of the female nurse leader is critical in the provision of effective and high-quality care in any patient care delivery setting. This individual is the chief executive officer of both institutions. She is accountable and responsible for patient safety and quality. This includes all the nurse sensitive indicators recognized by regulatory and accrediting bodies, patient satisfaction, and financial performance. In addition, the female nurse in charge represents the direct caregiver voice at nursing leadership decision-making tables. This person must advocate

up to management for nurses and other staff, but also interpret and manage organizational decisions that come down to the unit. Because nursing influences everything from doctor satisfaction and patient length of stay to staff nurse turnover. As the demands of the job grow, the management of UCTH, Calabar and UNTH, Enugu, Nigeria are making a subtle, yet important, change in the nurse leadership status by elevating the job title to director.

With everything that is expected of nurse leaders in this role, UCTH, Calabar and UNTH, Enugu, Nigeria dedicating many resources to help them succeed, going well beyond traditional manager orientation.

The management of both institutions provide special on-site training; some send nurses to programs offered by universities or professional groups; and some link nurses with mentors and support groups. These efforts emphasize the complex role of nursing leadership and the importance of organizations developing strong leaders for middle management. Another way that both institutions are developing female nurse leaders includes using fellowships and institutes to further develop the knowledge, skills and abilities essential for nurse manager's success. These provide networking opportunities and often foster working in teams on capstone projects to develop, not only essential skill sets, but confidence in managing health related issues. In both institutions, female nurse leaders hold a pivotal role in linking the vision of the administration to actual clinical practice at the bedside. The female nurse leadership role is currently seen as one of the hardest, most complex roles in both institutions. The female nurse leader is responsible for translating strategic goals and objectives formulate at the operational level into

practice; thus, the position of nurse leader requires an ability to interpret general concepts and integrate them into specific clinical and management performance, while simultaneously determining and monitoring outcomes.

This nurse leadership role is important because it is the direct link between the administrative mission and vision, and the direct care provider. In addition, the nurse role provides not only administrative and clinical leadership, but also has 24- hour accountability for all patient care activities on the unit. The role of the nurse in the acute care nursing area is pivotal in the development and retention of staff, as well as overall unit productivity. In total, the female nurse has the responsibility to assure that the mission of the institutions are translated into everyday practice, while assuring the quality and efficiency of the daily operations of their unit.

Remarkably, the nurse leadership role has become increasingly complex due to the shifting environment of health care delivery, largely due to the evolution of care that has occurred at the nursing unit-level. Tremendous transformation over the past decade includes management of increased complexity in clinical nursing practice, shorter hospitalizations for more acutely ill patients and pressures from compliance and regulatory agencies. Changes in healthcare economics, advances in technology, and structural operations in delivery systems have caused organizational transformation in healthcare institutions impacting nurse leadership. Nursing leadership is instrumental in role modelling and setting expectations for staff nurses regarding the importance of high quality, transparent and patient-focused care. Additionally, they are the conduit of communication between upper management and the bedside staff, providing key

messages and setting the culture for their units and organization. The importance of this role cannot be underestimated in successful healthcare organizations today. Categories of evolving roles of the female nurse leadership include:

- Management of clinical nursing practice and patient care delivery;
- Management of human, fiscal, and other resources;
- Development of personnel;
- Compliance with regulatory and professional standards;
- Strategic planning; and
- Fostering interdisciplinary, collaborative relationships within a unit(s) or area(s) of responsibility and the institution as a whole

Further breakdown of the management of clinical excellence included maintaining a safe, caring nurse planning includes translating the unit's strategic plan to staff, ensuring support of the plan, and modifying the plan in response to changing internal and external factors. At the unit-level, nurse leadership plays a pivotal role in promoting collegial relationships based on mutual respect and support. These collaborative relationships focus on patient care issues at the unit level as well as nurse retention level among nurses.

### **Recommendations**

Building upon the findings of this study, future research should consider a larger pool of organizations (sites) to enhance the diversity of participants and the generalizability of the findings to a larger audience. Multi-site studies provide the benefit of a broader sampling and a larger sample size which enhances the representativeness of

the study to the target population. In addition, this will enhance the accrual rates and promote more meaningful analysis within groups. Expanding the reach of the study to new organizations and states across the country will reduce bias and promote its generalizability to hospitals across the nation. Further, this will promote the meaningfulness of the findings and their application in the organizations.

Future studies must also consider broader methodologies that enable an expansive and informative analysis. The quantitative research design applied in this research, though excellent, limited the exploration and analysis of contextual variables likely to affect leadership techniques and nurse outcomes. Researchers must consider the vast breadth of information required to adequately explore the LMX context. A mixed methods approach will serve this purpose by allowing an expansive evaluation of qualitative factors and their association with the variables explored in this study.

Data archival should be an important consideration for future research based on the limitations imposed by the lack of archived data for the current study. It is important, however, to ensure the completeness, retention, availability, and security of the data in their systems for use by future researchers. Accessibility to management and leadership researchers is integral in promoting quality and informative studies at institutional and independent levels. Safe and adequate archival supports in-depth analysis and understanding of the topic issue, ensuring that researchers are fully informed and not missing critical data sets.

### **Implications for Social Change**

According to the International Council of Nurses Practitioner (NP)/Advanced Practice Nursing (APN) Network (2019), A nurse practitioner/advanced practice nurse is a registered nurse who has acquired the expert knowledge base, complex decision-making skills, and clinical competencies for expanded practice, the characteristics of which are shaped by the context and/or country in which she is credentialed to practice ensuring social justice.

In addition, the Royal College of General Practitioners (2022) defined APNs as experienced and autonomous registered nurses who have developed and extended their practice and skills beyond their previous professional boundaries. Characteristically, APNs are self-directed, work beyond their initial registration, and engage in direct clinical practice, education, research, and management. Their titles and roles vary according to country needs: NP in the United States, United Kingdom, Canada, and New Zealand or APN in China, South Africa, Korea, Singapore, Hong Kong, Thailand, Australia, and Finland.

Furthermore, evidence from literature showed that expanding the traditional role of registered nurses in healthcare delivery improved patient's health care access and satisfaction, reduced wait time, reduced doctor shortage in healthcare delivery, cut healthcare costs and wait time and provided care comparable to or better than physicians in ambulatory care settings. Accordingly, the management of both UCTH, Calabar and UNTH, Enugu, Nigeria recommended that transforming the healthcare system to meet the demand for safe, quality, and affordable care will require a fundamental rethinking of the

roles of many healthcare professionals, including nurses. It further stated that nurses are well positioned to help meet the evolving needs of the healthcare system and have vital roles to play in achieving patient-centered care, strengthening primary care services, delivering more care in the community, and providing seamless coordinated care.

### **Conclusion**

This study is an attempt to examine nurse relationships, techniques, and turnover with female nurses at UCTH, Calabar and UNTH, Enugu, Nigeria. In line with the above research questions and the hypotheses formulated for the study, the results obtained from the data set shows that there was a moderate/weak positive correlation between nursing leadership and nurse retention levels ( $r = 0.36$ ,  $p < 0.001$ ) with high level of nurse leadership effectiveness associated with higher levels of nurse retention. Also, findings revealed that there was a weak negative correlation between nursing leadership and burn-out levels ( $r = -0.21$ ,  $p = 0.040$ ) with high level of nurse leadership effectiveness associated with lower levels of burn-out or work-related stress, environment for patients, developing methods to assess patient's and family's response to nursing care, validating consistent medical regimes, and evaluating the effectiveness of the unit based clinical programs. Managing resources was further defined as ensuring the effective and appropriate utilization of human and fiscal resources. Human resource development includes participation in the development and support of multi-skilled workers utilized in delivering patient care. Standards compliance includes accountability for local, state, and national professional organizations, regulatory agencies, and government.

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