



**EVALUATION ON THE IMPACT OF HUMAN RESOURCE MANAGEMENT
PRACTICES ON QUALITY HEALTHCARE IN NIGERIA**

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By Eucharia Chinyelu Egbo

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Approval of the Thesis

**EVALUATION ON THE IMPACT OF HUMAN RESOURCE MANAGEMENT
PRACTICES ON QUALITY HEALTHCARE IN NIGERIA**

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Doctor of Philosophy (PhD) -Business

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Abstract

EVALUATION ON THE IMPACT OF HUMAN RESOURCE MANAGEMENT
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The public outcry for quality healthcare (QHC) in Nigeria has been on the increase, and the deteriorated state of healthcare in the country is of great concern. However, there are limited studies on human resource management practices (HRMPs) and their influence on quality healthcare in Nigeria. This study addressed these gaps by examining the empirical link between HRMPs such as recruitment, reward system, teamwork, training and development, and quality healthcare.

The study was underpinned by Herzberg's two-factor theory of motivation and the Donabedian quality of care model rooted in a positivist philosophical assumption. The population comprised health professionals at government tertiary health institution Lagos State University Teaching Hospital (LASUTH) including doctors, nurses, pharmacists, laboratory scientists, dieticians, and physiotherapists. A quantitative research design was adopted using an online survey. Thirty-nine items on a five-point Likert scale were used, and three hundred and fifty-seven (357) valid responses were analysed.

Participants included 235 females (66%) and 122 males (34%). Age distribution was 21-30 years (34.45%), 31-40 years (33.61%), 41-50 years (17.36%), and 51-60 years (13.44%). From the data analysis and evaluation of the findings, the study revealed a strong and significant link between HRMPs and QHC, with teamwork as the greatest predictor. Non-monetary rewards gained significant recognition; thus, there is a need to equilibrate non-financial and financial reward. Policy makers and hospital management can adopt these HRMPs to enhance QHC strategically in Nigeria.

Keywords: Human Resource Management Practices, Quality Healthcare, Reward System, Teamwork, Recruitment, Training and Development.

Declaration

I declare that this thesis was composed by myself, that the work contained herein is my own except where explicitly stated otherwise in the text, and that this work has not been submitted for any other degree or professional qualification except as specified. No part of this work has been published.

AI Acknowledgment

I acknowledge my use of ChatGPT (<https://chat.openai.com/>) to correct and check chapters 3, 4, and 5 of my thesis. This action was completed on 16.09.2025.

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Dedication

This thesis is dedicated to the **ALMIGHTY GOD**, “who made everything possible and beautiful in his time” (Ecclesiastes 3:11). Thank you so much, dear Lord.

Acknowledgements

First, I am eternally grateful to **JEHOVAH GOD OF WONDERS** for his grace, mercy, and favour that enabled me to achieve this great milestone. To him alone be all the glory-Amen. I expressly thank my supervisor; I am fortunate to have a supervisor who is a great source of support and shows deep interest in my work. Dr. Waliu Adegbite has been guiding me all through the process with patience, calmness, and integrity. His insightful comments on many drafts and innumerable discussions encouraged me to reflect and ponder, leading to several improvements on the overall structure of the dissertation and the accomplishment of this arduous task.

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List of Abbreviations

HRMPs	Human resource management practices
QHC	Quality healthcare
HRMP- RC	Human resource management practice- Recruitment
HRMP- RW	Human resource management practice- Reward system
HRMP- TW	Human resource management practice - Teamwork
HRMP- T&D	Human resource management practice – Training & Development
QHC- S	Quality healthcare -Structure
QHC- P	Quality healthcare - Process
QHC- O	Quality Healthcare - Outcome
Q	Question

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CHAPTER ONE: INTRODUCTION

Healthcare is a fundamental element of national development and societal well-being but access to quality healthcare remains a global challenge (Abah, 2022; Rad, 2025). Human resources, infrastructure, leadership and technology, among others, are well-known as influencing factors to quality healthcare (Hampel & Hajduova, 2023). However, within these categories, human resource is recognized to have a significant effect on health system success and growth (Aburummana, 2020; Akinwale & George, 2023). In the Nigerian context, where quality healthcare remains a national challenge and health organizations are recurrently under resourced, the vital role of effective HRM in improving health delivery is acknowledged (Fregene, 2015; Oduwusi, 2018). This study evaluates the impact of HRMPs on the quality of healthcare in Nigeria, focusing on how recruitment, reward system, teamwork, training and development shape healthcare service delivery. Health organizations globally rely on a well-managed, knowledgeable and motivated health workforce to operate optimally. Studies illustrated that nations with strong HRM framework tend to have better health outcomes, improved patient experience, staff satisfaction and better-quality service delivery (Gile et al., 2018; Sheffel et al., 2024; Wang et al., 2024). HRM in healthcare involves strategic activities aimed at recruiting, training, motivating, developing and retaining staff using means that align with institutional goals. These practices are significant for the employees' morale, efficiency as well as for the consistency and quality of patient care (Al Alawi, 2024; Purwadi et al., 2024).

Until now, several African countries were unable to provide the basic requirements suggested in the framework by World Health Organisation (WHO), and many are still overwhelmed with inadequate quality healthcare and health workforce-associated challenges (Ahmat et al., 2022). According to a WHO (2011) report, Africa is afflicted with twenty-five

percent of the world's disease burden despite being just about a seventh of the global populace. Unfortunately, Nigeria, the most populous African nation, is among those with the highest healthcare challenges on the continent and ranks lowest in several key health indices, including maternal mortality, child morbidity, life expectancy, and malaria, with overall poor health outcomes (Oleribe et al., 2019; Mukhtar, 2021). Studies have highlighted a significant rise in public concern and a desperate plea for quality care in Nigeria as the society's attention is greatly stirred on the subject of appropriate quality care (Ephraim-Emmanuel et al., 2018). The Nigerian health system is presently going through tremendous strain with an increased petition from the society for quality care, good experience, and better health outcomes. Some contributory factors to the country's poor health system are weak policy implementation, limited funding, inadequate personnel, lack of resources such as current equipment, and run-down infrastructure (Ubochi et al., 2019).

In Nigeria, several autonomous groups and government bodies have made efforts to fix the gap but with minimal progress. Amongst them is the “Society for Quality in Healthcare in Nigeria” (SQHN), a not-for-profit organisation incorporated in 2006 for quality improvement. SQHN concentrates mainly on training and accreditation processes (Oleribe et al., 2019). Also, the “Health strategy and delivery foundation” (HSDF) attempts to contribute its own portion to enhancing quality through upgrading of health sector decision-making and implementation. Other groups have prompted stand-alone quality initiatives; despite substantial investments in the health sector and the availability of a skilled workforce; many Nigerians still lack access to timely and quality healthcare. One of the major challenges behind this crisis is the ineffective management of human resources for health, which consists of doctors, nurses, midwives, pharmacists, laboratory scientists, dieticians, and physical therapists, who drive the health system. This leads to a shortage

of health workers, creating gaps in service coverage with inadequate skill mixes (Oleribe et al., 2019). The scholars further emphasized that the resultant effect is staff's poor attitude to work, absenteeism, and continuous strike actions. The greatest devastating setback was witnessed in Nigeria during the peak of the Covid-19 outbreak when the resident doctors' commenced an indefinite nationwide strike (Muanya & Onyedika-Ugoeze, 2020).

Studies have shown a direct link between healthcare quality and adequate workforce because inadequate personnel constraints and compromises quality service delivery (Cometto et al., 2020; Obubu et al., 2023). The recent covid-19 pandemic, which ravaged the world, further revealed how frail and reliant the society was on the health system and health workforces. There was an overwhelming shortage of professionals globally, and (Boniol et al., 2022) forecasted an impending shortage of about 18 million healthcare personnel by 2030, especially in low- and middle- income nations. Similarly, a report from (Eromosele, 2021) predicted that Nigeria will have a shortage of about 50, 120 doctors and 137, 859 nurses by 2030. According to Bridges et al., (2019) global researches evidenced that nursing staff shortages negatively affects the quality of care in most hospitals, especially in less developed countries. Review of literature revealed that nurses are the backbone of healthcare and critical for safety, quality delivery and strengthening of universal health coverage (Saifuddin, 2023). This emphasizes the significance of human resources in health improvement and supports the assertion that workforces are fundamental in excellent healthcare delivery.

Skilled and motivated health workers are required to overcome the bottlenecks that hinder international and national health goals (SGDs). Nyoni et al. (2006) highlighted that “health sector is not only labour-intensive, but it also depends on a precise application of the knowledge and skills of its workforce to ensure patient security and health” (p. 1). Indicating that effective leading-

edge quality improvement can be accomplished in healthcare if the workforces are knowledgeable and more involved in quality change. To this effect, a well-organized HRM with a responsibility to accurately recruit, motivate, train, and retain skilled personnel becomes crucial. Chams and Garcia-Blandon (2019) accentuated that HRM ensures and enhances accurate utilization of workforces and productivity within an organization. Similarly, Anwar and Abdullah (2021) suggested that appropriate management of HRM practices has been noted to promote good communication, teamwork, and job satisfaction, resulting in better performance and improved quality service delivery.

The situation is dissimilar in Nigerian health institutions, often characterized by disjointed policies, inadequate planning, workforce shortages, ineffective recruitment, and inconsistent training and development opportunities. Motivation and satisfaction amongst the professionals remain low due to poor and irregular remuneration, poor career progression, unfavourable working environments, and security issues. These challenges have led to extensive migration of skillful health employees. This resulted in overstretching and demoralization of the available personnel, contributing to the poor quality of care delivered in many Nigerian hospitals.

Considering these concerns, the study intends to evaluate the impact of HRM practices on the quality of healthcare in Nigeria, with the aim to identify vital aspects for policy and management improvement. The importance of this study lies in its possibility to provide empirical evidence linking human resource strategies to healthcare quality and thus inform better decision-making by policymakers, health management, and other stakeholders.

Statement of the Problem

The health sector is among the fastest-growing and most highly competitive industries and the concept of healthcare quality has gained lots of attention not just as positive patient outcome

but also as a means of attaining financial survival for health organizations and the nation's economic growth. Despite the significance of healthcare as a backbone in the growth of a nation, the quality of healthcare delivery in Nigeria remains a major concern. There is a persistent report of dissatisfaction among patients, families and the healthcare workforce with increased poor patient experiences and negative health outcomes (Akunne et al., 2022; Etim et al., 2023; Iloh et al., 2012). Notwithstanding the recognized importance of health workforce in driving efficiency and quality of care, the Nigerian health system continues to experience challenges associated with poor reward system, ineffective recruitment practices, poor teamwork, and inadequate training and development (Akinyemi et al., 2022; Bello et al., 2021; Lawal & Crioma, 2020). For example, lack of structured recruitment processes often leads to the engagement of unqualified professionals with inadequate skill mixes thereby compromising quality of care (Nwafor & Odimegwu, 2023). Correspondingly, poor reward systems decrease the workforce's dedication and morale with negative consequences on efficiency and overall patient care (Enyina et al., 2023). Inadequate training and development impedes improvement of skill and innovation (Ali et al., 2019). While ineffective collaboration among the multidisciplinary team hinders job satisfaction, productivity, patient safety, and health outcomes (Nguyen et al., 2020).

Overall, there is still a marked shortage of a proficient and motivated workforce with the zeal to accomplish set goals and provide quality care in Nigeria (Hamadamin & Atan, 2019; Chams & Garcia-Blandon, 2019). A report from Nigeria's Federal Ministry of Health (FMoH) indicated that out of 90,000 medical doctors registered with the Medical and Dental Council of Nigeria, only 55,000 are practicing in the country (Muanya & Onyedika-Ugoeze, 2020; Oyadiran et al., 2020). The nation has the necessary clinical skills, but continuous "brain drain" leads to shortage amid abundance. To buttress this, five wards with about 150 beds were shut down in Lagos University

Teaching Hospital due to unavailability of health workforces (Ojuroungbe, 2023). Ultimately, these shortcomings contribute to suboptimal care, increased mortality, negative health outcome,s and increased patient dissatisfaction.

Although literature emphasized effective policy implementation, adequate infrastructure, funding, and good leadership as instrumental in improving workforce performance and positive employee behaviour (Arimoro, 2020; Fajana et al., 2011). Yet, they do not necessarily address the underlying gap associated with quality healthcare services and HRM, which (Mohamed & Hameed, 2015) emphasized lacked substantial study in Nigeria. Hence, there is a need for more research on HRMPs and quality healthcare in the Nigerian context. Previous studies (Madu & Osborne, 2023; Odey et al., 2023; Okolo et al., 2019; Uzochukwu et al, 2015) were mainly concerned with health funding, tools, and infrastructures, with little attention on how to drive quality service through healthcare professionals. Therefore, there is a need to pay more attention to healthcare workers because failure to focus on an approach that will motivate and improve job satisfaction, teamwork, training, and development might lead to endless effort to improve quality healthcare services, performance, and retention without positive result.

This study identify HRMP gaps and intends to provide an in-depth understanding of the impact of some of the HRMPs such as recruitment, reward system, teamwork, training, and development on quality health care services. Supporting the work of Scott-Emuakpor (2010), he opined that the potential solution to Nigerian healthcare challenges is in the hands of health human resources, who are the key organizational asset with the capabilities required for effective transformation.

Thus, the insights from this paper aim to support healthcare service providers, policymakers, government, and other stakeholders by clarifying how HRMPs such as reward

system, recruitment, teamwork, training and development could be utilized positively to reduce "brain drain." As well as enhance skilled health workers' motivation, job satisfaction, retention and improve quality healthcare delivery in Nigeria. The findings recommend policies to promote health personnel efficiency, and quality of healthcare and contribute to better health outcomes.

In addition, this current study presented a significant podium to address the gaps noted in literature. The study of Akinwale and George (2023) suggested brain drain effect as a rationale for deteriorated healthcare quality in the Nigerian public health system; however, this is only a single factor among many others. Similarly, Amedari and Ejidike (2021) examined efficiency, accessibility, and improvement of healthcare quality from the angle of unsuccessful government strategy in Nigeria. Habtoor et al. (2016) also investigated the effect of human resource management practices on quality of services, but the study was conducted on hospitality industry. The identified HRMPs did not address quality service in healthcare hence another reason for this current study. Zaiter et al. (2021) illustrated human resource management practices and quality healthcare but in a private hospital in Lebanon without elaboration of quality findings or a clear theoretical approach used. It is worthy to note that none of these previous studies evaluated the influence of human resource management practices on quality healthcare in a public health facility. This present study using the public health sector in Nigeria has delved into and combined the justification behind the poor quality of care from different HRM practices using recognized theoretical frameworks that have the potential to address the study problem and support staff motivation, performance, retention, and quality service delivery.

Purpose of the Study, Research Aims, and Objectives

The purpose of the research was to analyze the aspect of human resource management practices (HRMPs) that health organizations could adopt and strategically implement to improve

healthcare quality. The drive emanates from poor quality of care in Nigeria associated with heavy workload, job dissatisfaction and incessant mass migration of healthcare professionals to developed countries. This has gross negative effect on quality service delivery due to shortage of skilled personnel and burnouts on the limited available workforces. Literature disclosed that achieving quality healthcare primarily depends on the health workers' skills, knowledge, and motivation (Aranha & Venkateswaran, 2020). Hence, there is a need to understand the identified HRM practices at the macro and micro levels for better implementation. Effective HRM practices will increase the staff knowledge, skills, performance and ability to deliver quality service. Additionally, it will serve as a guide for stakeholders to strategize and provide better work environment and benefit for healthcare personnel in order to enhance their performance and retention rate.

Aims: This study explores the impact of selected HRM practices on quality healthcare services in Nigeria. Four HRM practices (reward system, recruitment, teamwork, training and development) were identified. The findings intend to provide additional knowledge to policy makers and hospital management. The information will enable them to develop an administrative framework to improve staff skill, knowledge, dedication, work satisfaction and retention for better quality service delivery.

Objectives: The broad objective of the research is to describe the relationship of the selected HRMPs on quality healthcare service in the designated Nigerian tertiary government hospital. The nation's health system is multifaceted and achieving universal quality service delivery is challenging. Therefore, the key objective of the study was to examine the individual HRMPs that will boost quality healthcare delivery in the country.

In order to achieve this are the specific objectives listed below:

- A. To examine the relationship between reward system and quality healthcare service delivery
- B. To examine the relationship between recruitment and quality healthcare service delivery.
- C. To examine the relationship between teamwork and quality health care service delivery
- D. To examine the relationship between staff trainings and development on quality healthcare service delivery.
- E. To examine the factors that enhances the relationship between human resource management practices on quality healthcare.

Nature and Significance of the Study

Human resource management practices (HRMPs) involves a number of vital activities that build and improve staff skill such as capacity building, training and development in order to ensure optimal performance and high quality service delivery. HRM has been recognized to play significant role in an organization quest for relevance and competitiveness. This study focused on government health provider and the outcome will facilitate the practical application of HRMPs to health institutions. With respect to the deplorable state and poor quality condition of the health system in Nigeria, the findings will aid various stakeholders such as hospital administrators, policymakers, healthcare professionals, and the society.

The study findings support development of healthcare workers policies, mainly in the aspects staff motivation, recruitment and working conditions. This will help to address shortage of health workers leading to better workforce planning. It informs reforms that strengthen health system by aligning HRMPs with wide-ranging health organization set goals and demonstrates accountability and governance.

On the aspect of hospital administrators, the findings will enhance strategic decision-making and operational efficiency. Effective HRMPs enable administrators to identify practices

that promotes job satisfaction, reduction of absenteeism and staff turnover rate. It supports staff planning and improve productivity thereby, reducing cost of frequent replacement and service disruptions. In addition, enhanced HRMPs supports adherence to safety standards, clinical protocols and quality care services.

Robust HRMPs leads to well-staffed and better-managed health system, which improves service delivery, reduces waiting times, and improves health outcomes. Societal trust or confidence in the health institutions grows when they recognize healthcare workers are motivated, satisfied and competent.

The study recognized the need for professional development and continuing education for the workforces as well as balanced approach to remuneration. These will boost staff morale, increase knowledge and job satisfaction. These in turn will lead to better outcome for the patients, job satisfaction for the professionals, increase performance and productivity for the health organizations. In addition, the study will provide valuable insights into HRMPs that can be optimized to promote good team spirit among the workforces (Varga et al., 2023). This will help to mitigate against the challenges to quality care delivery and potentially reduce mortality and morbidity rates.

The overall intent is to enhance quality healthcare delivery in Nigeria, reduce health professionals' migration and medical tourism as well as strengthen the existing health systems and the nation's economy. Boyce and Brown (2019) stressed on the creditable contributions of health industry to a nation's economic and social stability, but these laudable benefits are not felt in Nigeria. This is due to the negative impact of continuous traveling of affluent Nigerian overseas for their health needs, leading to the loss of huge amount of money. Shehu (2019) reported that Nigeria spends about one billion US dollars (\$1b) on medical tourism annually. This was

confirmed by (Aguale et al., 2020) indicating Nigeria spends N175 billion yearly on medical tourism. It is noteworthy that these funds would have been helpful for restructuring the nation's health system. Therefore, this study will inform policy makers and other stakeholders on practices required to increase employees' job satisfaction, skills, knowledge, motivation, retention for higher performance and quality service delivery.

Research Questions: Recognizing the significance of human resource management practices in Nigeria requires specific steps to establish suitable strategies. Phase one, is to closely focus on the existing limitations within the health sector to develop an appropriate course of action. Considering the quality of healthcare and the challenge associated with health workforces' shortages, could provide in-depth information and advance performance. It has been recognized that staffs are the critical tool for desired quality actualization. Zaiter et al. (2021) indicated that human resource plays a vital and active role in the success of health quality reformation. Therefore, this study intends to answer the following research questions and hypotheses considering the itemized variables: recruitment, reward system, teamwork, training, and development.

RQ1: What is the relationship between human resource management practices and quality healthcare?

RQ2: What is the relationship between recruitment and quality healthcare?

RQ3: What is the relationship between the reward system and quality healthcare?

RQ4: What is the relationship between teamwork and quality healthcare?

RQ5: What is the relationship between training and development and quality healthcare?

Research Hypotheses: The study adopted an alternate hypothesis, which proposes a possible relationship between two variables namely the dependent, and independent variables. Unlike the

null hypothesis that states there is no relationship between the variables of study (Zeng et al., 2020). The hypotheses are as follows:

1. H₁: There is a significant relationship between recruitment and quality healthcare
 H₀: There is no significant relationship between recruitment and quality healthcare
 H₁: There is a significant relationship between recruitment and quality healthcare structure.
 H₀: There is no significant relationship between recruitment and quality healthcare structure
 H₁: There is a significant relationship between recruitment and quality healthcare process
 H₀: There is no significant relationship between recruitment and quality healthcare process
 H₁: There is a significant relationship between recruitment and quality healthcare outcome.
 H₀: There is no significant relationship between recruitment and quality healthcare outcome
2. H₁: There is a significant relationship between reward system and quality healthcare
 H₀: There is no significant relationship between reward system and quality healthcare
 H₁: There is a significant relationship between reward system and quality healthcare structure
 H₀: There is no significant relationship between reward system and quality healthcare structure.
 H₁: There is a significant relationship between reward system and quality healthcare process
 H₀: There is no significant relationship between reward system and quality healthcare process
 H₁: There is a significant relationship between reward system and quality healthcare outcome.
 H₀: There is no significant relationship between reward system and quality healthcare outcome.
3. H₁: There is a significant relationship between team work and quality healthcare
 H₀: There is no significant relationship between teamwork and quality healthcare.
 H₁: There is a significant relationship between teamwork and quality healthcare structure.

Ho: There is no significant relationship between teamwork and quality healthcare structure.

H₁: There is a significant relationship between teamwork and quality healthcare process.

Ho: There is no significant relationship between teamwork and quality healthcare process.

H₁: There is a significant relationship between teamwork and quality healthcare outcome.

Ho: There is no significant relationship between teamwork and quality healthcare outcome.

4. H₁: There is a significant relationship between training and development and quality healthcare.

Ho: There is no significant relationship between training and development and quality healthcare.

H₁: There is a significant relationship between training and development and quality healthcare structure.

Ho: There is no significant relationship between training and development and quality healthcare structure.

H₁: There is a significant relationship between training and development and quality healthcare process.

Ho: There is no significant relationship between training and development and quality healthcare process.

H₁: There is a significant relationship between training and development and quality healthcare outcome.

Ho: There is no significant relationship between training and development and quality healthcare outcome.

Organization of the Study: The study consists of five chapters. The first chapter briefly introduced the study, research problem, and objectives, significance of the study and the research questions and hypotheses (alternate). The second chapter is a comprehensive review of existing related literature and the empirical review of relevant literature. Thus, an in-depth discussion of the two study constructs, namely, human resource management practices and the sub- constructs

consisting of recruitment, reward system, teamwork, training and development. As well as quality healthcare and the sub-constructs comprising structure, process and outcome. This second chapter equally present the theoretical and conceptual framework that forms basis of the study. The third chapter is research methodology consisting of research design incorporating sampling techniques, data collection methods and operational definition of variables. Materials/instrumentation of research tools, hypothetical framework, study procedures and ethical assurances and data analysis techniques. The fourth chapter illustrate result reporting and trustworthiness of data, reliability and validity and evaluation of findings. While the fifth chapter describes the implication of finding, a recommendation for application, and a recommendation for future research, followed by a conclusion.

CHAPTER TWO: LITERATURE REVIEW

Theoretical and Conceptual Framework

This chapter presents the literature review context and theoretical framework with focus on human resource management practices (HRMPs) and quality healthcare service. The aim was to review relevant theories and evidences from previous and existing knowledge on the topic of the study. The key concepts reviewed are the Nigerian healthcare system, HRMPs, quality healthcare services and the relationship between HRMPs and quality healthcare services. The first construct HRMPs consists of four sub- constructs namely recruitment, teamwork, reward system, training, and development. These sub-constructs were addressed by Herzberg two- factor theory of motivation also referred to as motivation –hygiene theory. The second construct, quality healthcare was examined with the use of Donabedian quality of care model (structure, process and outcome).

Conceptual Review of Literature

Health and wellbeing is a fundamental right of every individual and access to safe and quality healthcare for all has been a global concern. World Health Organization defined “health as a state of complete physical, mental and social well- being and not merely the absence of disease or infirmity” (Scharmme, 2023, p. 210). Healthcare has been in existence during ancient times, and care for individuals with ailment was the responsibility of family, household members or the community. Hence, the use of cultural related traditional medicine that relies on indigenous health practices, understandings and beliefs, spiritual remedies, traditional bone settings, raw plants, herbs and animal-based drugs to prevent diseases, maintain wellness or treat illnesses (Gbakeji & Adjene, 2021). However, the primeval Greeks and Roman eras witnessed the use of temples of God as centers for care of sick people. This was based on the belief that sicknesses and diseases

were caused by displeased supernatural powers thus, divinities play a significant role in the curative process (Iorio et al., 2023). The advent of Christianity changed the perception of illnesses; hospital became an integral part of monasteries and churches. The nuns and monks were greatly involved in the practice of medicine and caring for the unwell individuals. The Cyprian plague of AD 312 – 313 revealed their efficiency through an organized institution set up by Christians in response to the pandemic. Members were trained and monasteries had both medical and administrative workforces comprising of doctors, nurses, porters and other allied staff (Robinson, 2021).

Many developing nations in Africa, for example, Nigeria continued the practice of traditional medicine alone until the colonial age and that marked the beginning of modern medicine with the establishment of dispensaries in the South-eastern part of the country in early 1880s (Scott-Emuakpor, 2010). The Roman Catholic missionaries built the first civilian government and military hospitals in the late 1880s (Ogaji & Brisibe, 2015). Over the years' healthcare evolved and transformed into modern technological health institutions with great emphasis on the significance of health professionals in care service delivery. Studies underlined the importance of human resource (workforces) in healthcare, because of their essential role in achieving and maintaining of quality care as well as organizational profitability (Akinwale & George, 2023; Mobasher, 2022). It has been recognized that organizations needs skillful, committed and knowledgeable staff for high performances, quality and success. Thus, planning, organizing and coordinating these activities within the organization forms an integral role of human resource management (Zaiter et al., 2021).

The Nigerian Healthcare System

Health care system consists of institutions, workforces and other resources involved in delivering health care services to individuals in need and the community at large. In Nigeria before the advent of contemporary health system, prior to western exploration and trading, the only healthcare system was traditional medicine. The traditional medicine practices in prehistoric Nigeria was comparable to other West African nations, wrapped in cultural myths and beliefs (Gietaneh et al., 2023; Moussavou-Boundzanga et al., 2020). Medicinal and healing practices were in the hands of diviners, herbalists, soothsayers, traditional birth attendants, native doctors, bonesetters and others. These traditional healers used herbs, animals, plants, minerals, oracles and divining knowledge to resolve health conditions. Diseases or ailments are believed to emanate from an individual's wrongdoings, evil powers, witchcraft or the enemy casting a spell on someone or an individual being punished by divine powers for act of sin or wickedness (Aregbeshola, 2021; Moussavou-Boundzanga et al., 2020).

Up to the present, traditional medicine is still being utilized by certain sects of the society not just in Nigeria and other African nations but also in the Southeast Asian (Anjorin & Wada, 2022), Eastern Mediterranean and Western Pacific areas of the globe. World Health Organization acknowledged traditional healers' contribution and deliberated on incorporating this practice into healthcare system nationally (Gietaneh et al, 2023). For example, in Nigeria, some individuals obtain mental health services from the hand of traditional healers just to avoid social stigmatization attached to mental health illness. In Gabon, traditional medicine has a very large percentage in the populace healthcare system especially in the treatment of liver diseases (Moussavou-Boundzanga, 2020). A literature review indicated that in Cameroon about 90% of children with cancer are treated with traditional medicine. Similarly, in Ethiopia, roughly 79% of the populace accesses

traditional healing centers, which is the recognized as the first and acceptable line of medical care (Afungchwi et al., 2017; Anjorin & Wada, 2022; Gietaneh et al, 2023).

However, Nigeria modern healthcare services came into existence during the colonial era and the initial healthcare facility referred to as the dispensary was opened in Obosi- Anambra state by the church missionary society in the year 1880 (Scott-Emuakpor, 2010). This was followed by two other dispensaries at Onitsha and Ibadan in the year 1886. The Roman Catholic mission instituted the first hospital in Nigeria ‘Sacred Heart Hospital’ in 1885 at Abeokuta- Ogun state. Towards the end of 19th century the British military services established military hospital followed by the foremost civilian government hospital “St Margaret hospital” at Calabar in 1889 (Ogaji & Brisibe, 2015). After the 1914–1918 world wars, several military and governments owned healthcare facilities were established in different parts of the country. Hence, the colonial masters’ introduced centralized control for all healthcare facilities in West Africa region comprising of Nigeria, Ghana, Gambia and Sierra Leone with the colonial office in London (Scott-Emuakpor, 2010).

Prior to Nigerian independence between 1952 and 1954, the control of healthcare services was transferred to the regional government (Eastern, Western and Northern regions of Nigeria) due to advancement and the complex nature of healthcare management (Ogaji & Brisibe, 2015). In 1954, Nigeria developed its first national policy for healthcare services, which was still in use after the country’s independence in 1960 and was later followed by the second policy (Ogaji & Brisibe, 2015). The third policy developed in 1975 superseded the other two policies due to its inability to achieve the expected goals. The desire to further advance healthcare services in Nigeria led to the development of fourth policy, the national development plan (NDP). The NDP of 1981 to 1985 gave birth to preventive health services under Professor Ransome- Kuti leadership with

the establishment of primary health centers (Amedari, 2020; Olufunlayo et al., 2023). Furthermore, in an effort to achieve notable improvement, the federal government adopted the World Health Organization (WHO) target “Health for All” by the year 2000 and this was marked with structural changes in healthcare administration yet the intended goals were not attained (Croke & Ogbuoji, 2024).

In an effort to resuscitate the country’s worsened health system, in 2005 the federal government introduced “Nigerian health insurance scheme” (NHIS) by “Decree 35 of 1999 provided for the institution of a governing council to manage the scheme” (Welcome, 2011). Conversely, the objectives of NHIS which is to ensure that every individual have access to good healthcare services and protection from the financial burden of medical bills as well as ensure reduction in the cost of healthcare services, efficiency, equity, quality, provision of adequate funding for health sectors has not been accomplished (Aregbeshola, 2021). Studies revealed that NHIS has provided coverage for barely ten percent of the total population of about 200 million (Ahmad & Lucero-Prisno, 2022; Akinyemi et al., 2021). Until now, the country is still struggling to meet the health needs of its teeming population. Scott-Emuakpor (2010) in his literature opined that the potential solution to Nigerian healthcare challenges is in the hands of health human resource who are the key organizational asset with the capabilities required for effective transformation. For example, achieving the health objective outlined in Sustainable Development Goals (SDGs) lies on healthcare professionals. Thus, Zurn et al. (2021) stipulated that availability of skilled, motivated and well-allocated professional is crucial for progressing towards universal health coverage. These personnel are valuable elements in preparing for and responding to emergencies, as well as providing comprehensive, unified and person-centered health services. Hence, their importance in excellent healthcare service attainment cannot be overemphasized.

Structure of Nigerian Healthcare System

The Nigerian health system is broad and comprises of the public (government), private, non-governmental organizations (NGOs), religious groups and traditional healthcare providers. The country operates three level of healthcare system namely the primary, secondary and tertiary healthcare system for her entire low and middle- income population (Azodoh, 2022; Koce et al., 2019). The primary health care is the first point of contact for individuals, families and communities. It is the bedrock of all healthcare and focus mostly on preventive and health promotion services such as family planning, immunizations to mention a few. The secondary health facilities function through state and general hospitals and is a referral centers from primary healthcare for minimal complex cases, in addition provides preventive care too. While, tertiary health organizations deal with cases that are more complex and is the highest level of care in the country, it consists of teaching and specialist health institutions (Jonathan, 2019). The federal ministry of health (FMOH), the major power player in Nigerian health sector, governs all healthcare providers. They develop and enact health policies across the nation, oversee and control health facilities, approve regulations, and ensures implementations of the policies ((Koce et al., 2019).

The responsibilities and management of the levels of healthcare services reflects three tiers of government namely federal, state, and local government (Koce et al., 2019). However, Aregbeshola (2021) suggested that the dispersion and division of healthcare system, combined with overlapping responsibilities between the three levels of government, have influenced accountability and the efficient healthcare delivery. The primary health care (PHCs) are managed by local government areas with support from their respective state ministries of health. The ministry of health at the state level manages secondary health care. While, the tertiary healthcare

such as the teaching hospitals are managed at federal government level (Ating, 2019; koce et al, 2019). In addition to the three tiers of healthcare in Nigeria, are non-governmental organizations, religious groups, private health sectors and trade-medical centers. All healthcare providers in Lagos state are monitored and accredited by Lagos state regulatory body also known as “Health Facilities Monitoring and Accreditation Agency” (HEFAMAA).

This study concentrated precisely on Lagos state and, HEFAMAA 2017 statistics revealed that there are about “26 registered general hospitals, 256 public healthcare centers, 2, 886 private hospitals or specialist clinics and laboratories or diagnostic centers and 160 tradomedical centers in Lagos state” (Musbau, 2017). The large number of private hospitals are associated with the general assumption and perception that they deliver more robust and better quality service in an efficient manner hence, private hospitals play a substantial role in the overall health sector growth and economy in Nigeria (Oladipupo, 2022). Sadly, the lower class or an average Nigerian that comprised of greater number of the total populace could barely buy a nourishing meal and obviously cannot afford the cost of private hospitals hence, unable to receive the basic quality healthcare required for optimal well- being. The National Bureau of Statistics 2022 report, revealed that 133 million out of about 200 million Nigerian population are greatly poor and the living standard extremely low, they do not have access to healthcare, education, employment and security (Tunji, 2022). Another review revealed that approximately half of the population lacks access to healthcare, leading to roughly 100 million individuals falling into poverty annually due to overwhelming healthcare costs (Abah, 2022).

The Current State of Nigerian Health Sector

Nigerian health sector has witnessed turbulences and tremendous evolution over the past sixty years (Ating, 2019). The health system is disintegrated, multifarious, health professionals

crisis, inaccessible and consistently underfunded and majorly rely on out of pocket or fee for service and insignificant health insurance coverage (Abubakar et al., 2022). Effective health system requires a good health financing system and budget allocation. Nigerian health financing are from three sources: First, private source, an out of pocket payments, which account for more than 70% of health expenditures. Second, public source comprise of Basic Health Care Provision Fund (BHCPF) aimed to provide access to healthcare for the vulnerable groups and National Health Insurance Authority (NHIA) for health insurance coverage. Third, is donor source which consist of partners such as WHO, World Bank, Global Fund, they contribute to disease programs as Malaria, HIV/AIDS, and Immunizations (Abeku, C. & Mohammed, 2023; Wright et al., 2025).

Regarding the national budget on health, Abuja declaration of 2001 set a benchmark of 15% budget allocation, regrettably, over the last few years the allocation has been drifting between 4% and 5% of the total national budget. To buttress, year 2024 total health budget was 4.6% and 2025 total health budget is 5.18%, an insignificant budget allocation despite increasing healthcare needs and growing population (Chiejina & Oguanuo, 2024; Ephraim-Emmanuel et al., 2018; Wright et al., 2025).

The health infrastructure in most Nigerian hospitals and accessibility are still a challenge. Despite efforts for improvement particularly, the attempt to achieve the United Nations Sustainable Development Goals (SDG 3) which is “to ensure healthy lives and promote wellbeing for all ages at all times” (Salami et al., 2023). Unfortunately, the challenge associated with universal access to health is worsened by high poverty level in the country where the poor and marginalized individuals are under resourced to cater for their health needs thereby leading to increase in health problems (Perre, 2014). In addition to the financial barrier is other difficulties to accessing healthcare such as poor transport system, long distance travelling to functioning hospital and

insecurity issues predominantly for those in the rural areas. Furthermore, uncondusive and deteriorating health facilities, outdated and non-functional equipment, and inadequate supply of basic medical supplies, affects service delivery negatively and is quite discouraging, and difficult for the healthcare personnel. This leads to low morale, dissatisfaction, poor quality service and desire to migrate to the developed countries (Umar et al., 2025).

The country is besieged with range of public health challenges from different factors, including a large and growing population, inadequate healthcare infrastructure, shortage of health professionals, poverty, urbanization, emerging infectious diseases and insecurity (Adede et al, 2024; Madu & Osborne, 2023). Nigerian population currently at over 200 million is estimated to reach 440 million by 2050 and 733 million by 2100 (Abubakar et al, 2022). The rapid growing population and other development challenges of the country if not addressed critically have a capacity to reduce the social and economic indicators for the whole of Africa (USAID 2019). Nigeria is among the fastest rising populations worldwide, growing at the rate of 3.2% yearly and having 5.5 live births for each female. The country has the fourth largest amount of HIV/AIDS individuals estimated to be about 9% worldwide burden and also have the highest encumbrance of malaria globally at 26.8%, with about 51 million cases and 207, 000 deaths per year. However, malaria was projected to increase in 2021 to 68 million cases with 194,000 deaths. (Tambe, 2019; WHO, 2022). Additionally, WHO (2022) further highlighted that four nations in African has over half of the global malaria deaths. Nigeria still top the list with an alarming percentage of “31.3% followed by the Democratic Republic of the Congo at 12.6%, United Republic of Tanzania 4.1% and Niger 3.9%”. Furthermore, on the review of maternal mortality and neonatal morbidity per 100,000 live births, Nigeria topped the list among sub- Saharan Africans with a total number if 814 and 34 respectively. In comparison to other sub-Saharan Africans such as Togo having 399

and 24, Gambia 458 and 24, Cote d'Ivoire 480 and 29, South Africa 127 and 11, Ghana 263 and 21 respectively (WHO, 2023). World Health Organization (2024) reported that Nigeria have one of the greatest rate of breast cancer deaths in Africa.

In addition, Sanni (2019) reported that the United Nation declared Nigerian as the country with the world's third lowest life expectancy and the lowest in West African sub-region. The average life expectancy in Nigeria is about 54.5 years with men having an average of 53.6 years and women 55.4 years. South Africa average life expectancy is 63.54, Democratic Republic of Congo 60.03 and Ghana 63.95 years. A review of other world countries with high average life expectancy revealed that Hong Kong have the highest with an average of 84.76 years, Japan 84.55 years, Switzerland 83.69 years, Spain 83.48 years, Italy 83.42 years and Australia 83.34 years (Abubakar et al., 2022; Muanya, 2019).

Table 1

Health Indicators for Nigeria

Indicators	Values
Maternal mortality ratio (per 100, 000 live birth)	814
Neonatal mortality rate (per 1,000 live birth)	34.1
Under five years mortality rate (per 1,000 live birth)	104.3
Death due to malaria (per 1,000 population)	0.97
Death due to HIV/AIDS (per 100, 000 population)	34.8%
Live birth per woman	5.5
Average life expectancy	54.5 years
Population growth rate yearly	3.2%

Nigeria Health Indicators comparison with some other African countries

Indicators	Nigeria	Ghana	Democratic Republic of the Congo	South Africa	Cote d'Ivoire	Gambia	Togo
Maternal Mortality per 100,000 live births	814	263	620	127	480	458	399
Neonatal Morbidity	34	21	26	11	29	24	24
Malaria	26.8%	2.1%	12.3%	0.8%	3%	0.2%	15.4%
Life Expectancy	54.5	63.54	60.03	63.54	60.1	64.1	61.8

(Arikawa et al, 2023; Ope, 2020; Ramazani et al. 2022; Statista Research Department, 2022)

In the communique issued at the end of Nigerian National Health Conference in 2009, emphasis was laid on the country's weak health care system. This was evidenced by lack of clarity of roles and responsibilities amongst different levels of government, service fragmentation and lack of coordination, poor access to care, scarcity of resources, inadequate and decaying infrastructure and deplorable quality of care (Welcome, 2011). After several years, the country is still discussing about adopting and commencing implementation of the "National Health Promotion Policy and National Quality of Care Strategy for the reduction of Maternal and Neonatal mortality at all levels" (Nursing World, 2019). USAID (2019) also professed Nigerian health indicators as one of the poorest in Africa. Nasir et al. (2022) revealed that Nigeria has the second highest maternal death globally and the highest neonatal mortality rates in Africa. Regrettably, at the Africa Health Agenda International Conference (AHAIC) held in 2021, Nigeria was ranked last in neonatal and maternal mortality using Africa Sustainability Index (Obinna,

2021). Although the government has put forward several health reforms to address the wide-ranging healthcare issues in Nigeria, implementation and accomplishment still poses a problem both at federal, state and local government level.

The health Millennium Development Goals (MDGs) has not been met and the progress of Sustainable Development Goals (SDGs) targets has been relatively slow. The SDGs 2019 index portrayed Nigeria was categorized 160th in comparison to other 165 countries evaluated for accomplishment of the Sustainable Development Goals (Abubakar et al., 2022; Ajala, 2022; Ejiogu, 2024). Similarly, Akinwale & George (2023) established that health care service provided in Nigerian hospitals are utterly undesirable despite several reforms hence, there is urgent need to improve the quality of healthcare which will guarantee positive health outcome for the populace.

Furthermore, (Abubakar et al., 2022) stipulated that the healthcare services in Nigeria, African most populous country has suffered numerous difficulties over the years, still in shambles and struggling to provide quality care services to advance the health status of its swarming population. Ubochi et al. (2019) highlighted that WHO in year 2000 ranked Nigeria 187 out of 190 nations based on health indicators such as inequalities, degree of populace health, health system responsiveness, health financial burden and responsiveness distribution within the public. After two decades, global health system ranking for 2021 using health index score revealed that Nigeria is among the ten countries with the lowest health index score of less than 50 globally. Nigeria health index score was 49.1, whereas, countries like Cote d'Ivoire has 53.5, Togo 54.9, Gambia 56.1 and Ghana 64.2 while, Japan tops the world list with 86.8 followed by Singapore 86.1 (Statista Research Department, 2022). These corroborates the previous reports and additional revealed the deplorable state of the country's healthcare system, which is still experiencing setbacks (Akinwale & George, 2022).

The country is further besieged with persistent and overwhelming attrition of healthcare professionals to the developed nations. Baker (2019) in Commons Library Briefing, stated that about 8, 241 Nigerian health professional work with National Health Service (NHS) in the United Kingdom, amongst these are over 5,000 doctors (Adegoke, 2019) and about 4,000 physicians in America (ANPA, 2020). In addition, figures from the Federal Ministry of Health (FMoH) Nigeria indicated that about 75,000 medical doctors are registered with Medical and Dental Council of Nigeria (Muanya & Onyedika-Ugoeze, 2020) and only 42,000 are practicing in the country (Oyadiran et al., 2020). Another report from (Akinkuotu et al., 2020) highlighted the increased number from 5, 000 to 7, 875 Nigerian doctors currently practicing in the United Kingdom however, recent report indicated that the number has risen sharply to 11, 000 (Adejoro, 2023). Similarly, report from Nursing and Midwifery Council of Nigeria revealed the drastic reduction of registered nurses in Nigeria and sharp increase on the number of practicing Nigerian nurses in the UK. In 2018 the number of Nigerian migrated nurses to the UK were 2, 796 and by 2022 it rose to 7,256 according to the “data from the development Research and Project Centre (dRPC)” The number witnessed a marked increase within one year by 46.6 percent leading to 10, 639 nurses in the UK by May 2023 (Bailey, 2023; Yusuf, 2022). The country has the required clinical expertise but persistent talent drain leads to lack or shortage of professionals in the midst of plenty.

According to (Bawalla & Adegbite, 2019) brain drain can be described as the migration of educated and skilled workforces from developing countries to developed countries for attainment of higher remunerations or better employment opportunities. This has led to acute shortage of personnel in important sectors in less developed nations. In Nigeria, this can be attributed to several factors such as high level of unemployment, unconducive work environment, poor reward system, poor standard of living, corruption, bad leadership, political instability and insecurity. A report

from (Amorha et al., 2022) highlighted that Nigerian physician's monthly earning is about US\$1,365. Whereas, in other neighboring African countries physicians earn higher wages for example, Sierra Leone receives about US\$2000 monthly. In contrast, physicians in the western world earns ten times higher with other fringe benefits in a more conducive work setting. The acute shortage of healthcare personnel, prevalence of infectious diseases and other health conditions remains high in Nigeria with an alarming poor patient-to-doctor ratio of 2,500:1 more than five times higher than the WHO'S recommendation of 600:1 (Onah, 2022; Oyadiran et al., 2020). In addition, the recommended nurse-to-patient ratio of 1: 120 alarmingly is 1: 588 and the result is negative healthcare delivery (Chiedozie, 2021). While, in Ghana, nurse-to-patient ratio remarkably decreased from 1:721 to 1:530 (MOH, 2022). The above, in addition to other factors such as low morale, heavy workload, poor reward system and inadequate motivation negatively impact the quality of health care and invariably patient dissatisfaction and the overall health outcome.

Although, healthcare at the global level has been recognized as the bedrock for human development and one of the fastest growing sectors in a nation's growth and economic development (Aranha & Venkateswaran, 2020; Boyce & Brown, 2019). However, studies from (Azevedo et al., 2019) highlighted the disarrayed healthcare system in Africa, which negatively affect the economic growth. The poor health condition of the populace makes it difficult for them to work and this contributes to reduced standard of living. There is a close relationship between well-being and income, as those with poorer health and lower incomes often lack the financial stability to manage potential health related setbacks. Whereas, the educated individuals often make better decisions that promote health outcomes, indicting connection between education, health, revenue and economic progress. Improved health can improve the economic situation of the workforces by reducing the amount of time spend away from work due to illness leading to

increased productivity. This in turn, creates opportunities for them to obtain additional revenues, curb expenditures, and make investments (Azevedo et al., 2019). Therefore, with a population of over 200 million, Nigerian healthcare has the prospect to boost the nation's economic survival, stability and progress if successfully reformed. Additionally, the transformed health system could make innumerable contribution to the health advancement of Africa and the worldwide community.

Human Resource Management Practices

The concept of human resource management (HRM) has existed as early as 2000 B.C., originally applied by the Chinese and the Greeks as "staff screening technique and apprentice system" respectively (Rotich, 2015). Since the industrial revolution of 18th century, HRM has undergone several transformations, shifting from the pre-historic traditional human resource to a team-centered and people-based approach in the 21st-century scientific era (Thakur, 2020). Early 20th century marked the birth of human resource management with focus on employee strategic management and emergence of sociological and psychological studies from renowned theorists. Fredrick Taylor (The Classical School), focused on the job, the work processes and efficiency among the workforces. While, Elton Mayo's Hawthorne (The Behavioural School), concentrated on the employees' welfare and satisfaction for higher performance and productivity (Tubey et al., 2015). The notion of human resource management grew in the 1980s following global economic downturn and pressures on organization to thrive and achieve competitive advantage due to the technological advancement, economic linkages across countries to promote foreign trade and fast changing business environment brought about by globalization (Carne vale & Hatak, 2020; Martin & Sundararajan, 2023). This prompted scholar to initiate deliberation on human resource within a firm from another viewpoint and this progressed to become human resource management

(O’riordan, 2017). The thought followed realization that workforces are the most significant assets among other assets such as finance, technology, equipment and others.

Human skills, knowledge and efforts are required for other assets to be operationally efficient and effective. Studies have revealed substantial evidence on the importance of workforces for attainment of organizational set goals, productivity and economic growth (Bawalla & Adegbite, 2019; Blstakova & Palencarova, 2021). Nevertheless, the negative and positive impact of work on individual well-being has long been identified hence, Galen, the ancient Greece wrote that work is “nature’s physician, essential to human happiness” (Litchfield et al, 2016). This denotes that human beings are active, energetic and derives pleasure from involvement in different work related activities, and indolence is considered a misery. Despite this, the authors further posited that industrial revolution epoch revealed certain work associated illness among the slave mineworkers, which, brought several benefits such as establishment of legislation to safeguard the workforce as well as reduce exposure, or minimize work related hazards.

It is noteworthy that globalization, the complexity, competitiveness and fluctuating business environment characterized by changing customers’ needs made marketplace more challenging. Thus, it became essential that human resources are managed in a sensitive manner to enable them realize their full potentials in a favourable work environment (Eche et al., 2022). Over the years, academics and practices recognized the crucial role of human resource management in enhancing employees’ performance (Hampel & Hajduova, 2023). To effectively compete, succeed and survive, firms needs to persistently develop and improve not only the product or service quality but optimally develop the workforces, which plays a significant role in organization’s ability to attain quality and success (Troth & Guest, 2020). The 21st century organization understands that tangible, technological and economic resources alone could not create competitive advantage

without the indispensable workforces who are the key drivers in the fast growing and highly competitive businesses such as health sector (Collins, 2021; Hampel & Hajduova, 2022). This portrays that organization with the capability to manage human resource effectively have a greater chance of being more productive and profitable.

The role of HRM in twenty-first century is more complex and contingent on the reality of today's competitive, fast-growing business environment and digital age (Chams & Garcia-Blandon, 2019; Martin & Sundararajan, 2023; Wahdaniah et al, 2023). HRM operations include recruitment, retention, rewarding, performance management, motivation, training and development, employees' welfare, empowerment, termination, and overall workforce maintenance (Aranha & Venkateswaran, 2020; Zaiter et al., 2021). More than ever before, little effort is required to relate quality service delivery to effective HRM due to recognized contribution of HRM to the improvement and development of employee skills, which is the central element for achieving high performance, quality service, and competitive advantage (Chams & Garcia-Blandon, 2019). Over the years, HRM has gained increased attention in the health sector due to its key role in healthcare quality improvement and overall retention of existing and attraction of new staff (Aburummana, 2020; Akinwale & George, 2023). In this context, an important antecedents and strategies for quality achievement are satisfaction of patient needs, ability to meet and exceed client expectations, and positive health outcomes through an efficient and skillful workforce (Aranha & Venkateswaran, 2020; Winter et al., 2020).

Thus, the adoption of new approach referred to as strategic human resource management, a branch of human resource management (HRM) that assist organization to harmonize staff skills with the expected business objectives. According to (Hamadamin & Atan, 2019) strategic human resource management (SHRM) is the practice of incorporating an organization's human resource

role into the strategic planning and execution processes for driving organizational growth. This involves applying human resource (HR) activities such as recruitment, selection, training, and compensation to support the development and implementation of the organization's strategies. SHRM recognizes the function of HR in organizational success as contributory factors in facilitating all operational activities and ensure this role aligns with organization goals. The strategic value of SHRM stem from the ability of human to make useful and quality business decision, cognitive skill and capacity to utilize other resources in the correct mix to attain the desired set goals (Sinnaiah et al., 2023). Organizational ability to establish alignment between the employees and objectives is crucial. Often underperformance within organization are associated with subtle conflict between the staff and organizational culture (Okolie & Udom, 2019). SHRM should concentrate on ensuring a balanced approach to promoting business objectives and accommodating the staff requirements. These are vital elements because meeting the needs of staff encourages and supports them to work harder towards attaining organization set goals through higher performance, productivity and quality services (Nafari & Rezaei, 2022).

Contemporary HRM equally adopt systematic strategies to increase organizational success and this involves development of approaches to clarify the existing and potential hitches as well as provide solutions for the identified issues. Mobasher (2022) stipulated that HRM could strategically achieve its vital role of employee career progression, high performance and quality services through effective recruitment, teamwork, reward system, training, development, career progression and conducive work environment. Part of these strategies entails been more proactive than reactive, oriented to action, talented staff, business, global market and the future. For example, instead of waiting for employees to leave an organization and then recruit another staff, they seek for ways to retain capable staff with the use of different HRM practices. Human resource

understand the impact of losing talented employees to their competitor and the negative consequence it would have on the organization performance and profitability. They make an efficient and effective use of human ability to achieve organizational objectives with increased emphasis on the needs of the workforce and organization as a whole. Thus, Okoro and Ndema (2023) reported that when staff feel valued and useful, they have increased job satisfaction, positive outlook to work, higher performance with reduced rate of absenteeism and staff turnover. More than ever before in the healthcare sectors, employees are more involved and engaged in decision making and some management activities. Therefore, HRM should ensure training; motivation and other strategies are implemented appropriately to enhance professionals' performance (Pillai et al, 2019). Additionally, modern HRM not only develop and facilitate program that will enhance collaboration and communication amongst the workforce in order to promote institution growth but also support creation of a work environment that will promote growth and development of staff as related to the company's circumstances (Mohamed & Hameed, 2015).

Literature revealed that HRM practices are significantly linked, directly or indirectly to healthcare service quality and positive patient outcome, and quality is identified as a precursor for business survival (Najam et al., 2020). In addition, a study by (Endeshaw, 2021) stipulated that previous studies have examined quality of healthcare from the perspective of patient described as the external customers hence, there is need to determine quality of care from the viewpoints of the health workforces, recognized as part of the internal customers. Therefore, health institutions in Nigeria should endeavor to understand quality from the employees' perspectives. It is essential that findings from this study be adopted especially the factors that inspires staff to increase performance and attain high quality care. Organizations should attempt to achieve a fit between what and where they are currently in terms of quality services and employees' motivation,

performance /retention and what they want to become. According to (Okolie & Udom, 2019) there is need to identify incongruences between the practice, skill mix, staff behaviours, work-life balance and other factors that can impede performance, quality, success and growth within the organization. This knowledge will assist HRM to adopt certain practices in an attempt to create effective and efficient workforces and maintain positive organization with high quality service delivery. A review of the literatures revealed some of HRM practices noted to be consistent with quality health care services and these are as follows: recruitment, reward system, teamwork, training and development (Adegbite, 2019; Greasidou & Valachis, 2022; Najam et al, 2020). Thus, this study intends to analyze these practices critically to enhance knowledge and understanding as shown below.

Recruitment and Quality service: The intensity of business competition globally and hunt for talents linked to high staff turnovers has compelled organization to seek for strategies to attract, recruit, develop and retain the right staff whose performance will drive them towards gaining competitive edge and attaining set goals (Bilan et al., 2020). The paradigm has shifted from financial capital to human resource as the greatest and most valuable organization's asset because there is a great link between organization financial growth and the workforces (Black & van Esch, 2020; Widarni & Bawono, 2021). There is a growing consensus that organizational effectiveness is largely contingent on competent, committed and loyal employees who are the bedrock for achieving high performance, quality and success (Bilan et al., 2020; Ukpabi & Salaudeen, 2021). However, obtaining these pools of talented and capable staff is mostly through efficient recruitment and selection process. Recruitment is one of the major human resource management function, plays a strategic role in an organization and is a process of searching for suitable applicants to apply for jobs in the organization (Bans-Akutey et al, 2021; Gaikwad & Vaishnav,

2022). Black and van Esch (2020) highlighted recruitment as the system used to identify, screen, select and employ potential suitable individuals to occupy identified vacant positions within the organizations. It is a process used to obtain the right number of right individuals with the right ability for the right job. Effective HRM identifies an organization human resource needs and plan for adequate staffing. The staffing process involves two activities namely recruiting and selecting to ensure the right individual that meet the organizational need and requirement are employed.

The process of recruiting entails to seek and attract some qualified individuals through job vacancies advertised. It is an essential operational role of human resource designed to utilize the strength of workforces to attain set goals of the organization (Moayedfar & Chafi, 2019). Recruitment activities concentrate on attracting determined numbers of potential applicants to apply for a specific vacant job opportunity. On the other hand, selection involves filtering method that enables selection of right individual from the pool of candidates applied for a certain job profile (Hamza et al, 2021). In this 21st century volatile market and changing customers' needs, recruitment has become very demanding and complicated particularly, recruiting competent candidates to help achieve organization set goals (Ukpabi & Salaudeen, 2021). Effective recruitment process helps to build an enabling environment for greater productivity through talented workforces because organization success and competitiveness is related to the performance of suitably recruited workforces (Bilan et al, 2020). Therefore, HRM should endeavor to attract, recruit and select adequate number of qualified candidates as proper staffing is crucial to build and sustain profitability and quality services. This implies that wrong or inadequate staffing could lead to under- achievement, poor quality service delivery and organization failures. In staffing process, recruitment precedes selection and recruitment involves stimulating pool of applicants to apply for available vacant position. On the other hand, selection process entails

choosing from numerous applications to select potential suitable applicants for the vacant job profile (Hamza et al, 2021).

The recruitment process is in two stages, it can be external or internal from staff presently working in an organization but a significant element of every recruitment process is appropriate planning (Okoro & Ndema, 2023). Internal recruitment involves identification and attraction of candidates from the current workforce within an organization. It entails obtaining previous appraisals/ competencies assessment result and a reference from the candidate line manager (Hussain, 2021; Okoro & Ndema, 2023). This could lead to either deployment or promotion from one position to another. The advantages of internal recruitment are as follows: it promotes employer and employee relationship, there is first-hand information on the staff competency level and the staff is equally familiar with the organization culture, values and so on. It also saves time and cost of recruitment. Additionally, it encourages staff retention as it promotes loyalties and career development thereby enhances productivity (Alzoubi, 2020). Despite, its huge advantage an existing staff might not possess the required competencies for a particular vacant job and this might negatively affect performance. The tendency to lobby for the vacant position might equally deny organization the benefit of recruiting a candidate with innovative ideas that will facilitate high performance (Mumba & Qutieshat, 2023).

In external recruitment, candidates are attracted from outside the organization and this can be through active or passive recruitment or combination of both methods. The active recruitment involves newspaper advertisement, head- hunting, recruitment agencies, social media, educational institutions and trade unions to mention a few (Chukwu & Onuoha, 2022). The advertisement includes candidate profile, which is of utmost benefit because it creates an enabling environment for employers to evaluate candidates' skill in diverse situations using various tools and methods.

The benefit of external recruitment is that it promotes equity, equality and is merit- based; every potential candidate has the opportunity to apply and participate in the recruitment and selection process. However, the shortcomings are- high cost associated with advertisement, induction program, onboarding, training and development. Whereas, passive recruitment is scrutinizing of the curriculum vitae of candidates who previously partook in an organization recruitment process but were not selected for immediate employment rather were kept in view. However, this method may likely lead to behavioural concerns, which can demotivate and lower staff morale especially for long-term employees and may negatively influence performance (Alzoubi, 2020). Selection is a critical process that systematically and objectively ensure that competencies of potential candidate conforms to the job description and specification of the position with an aim to choose the best possible candidate. However, for effective selection some factors needs to be considered for example, candidates' level of education, skills, experience, and competency.

There are certain steps in recruitment and selection process that contributes significantly in finding suitable applicants for job vacancies and these includes job vacancy, job analysis, attracting candidates, screening, candidate initial conversation, interview, selection and appointment. Onboarding and staff evaluation (Gaikwad & Vijendra, 2022).

In healthcare organization, the importance of effective recruitment has been well established. Krebs et al. (2021) underscored that effective recruitment of competent healthcare workers is essential to avert major challenges associated with hiring unqualified professional. AlHamada et al. (2022) emphasized the significance of recruitment on quality healthcare services delivery, as qualified and experienced workforce are agents for quality delivery. Studies from Nigeria and sub-Saharan Africa, recognized service inefficiencies to be associated with ineffective recruitment exercises, which are due to unscrupulous factors such as tribalism, corruption,

nepotism, personal and political influence (Azeez et al., 2020; Nwafor & Odimegwu, 2023). This unethical method of recruitment often leads to high staff turnover, absenteeism, poor quality services and inability to achieve the set target. These can be related to erroneous recruitment of unqualified and inexperienced candidates who lacks the essential competencies and are not fit for the job (Nwafor & Odimegwu, 2023). Overall, staff shortage due to the high turnover and unequal distribution of the available workforce can lead to mental and physical exhaustion for the remaining staff resulting to poor quality services and negative health outcome (Mahdavi et al., 2023). Therefore, emphasis should be on staff knowledge and skills, retention, and reduction of staff turnover and knowledge preservation.

Several studies suggested that recruitment of skilled and right staff would enhance quality care services hence, the importance of ensuring adequate skill mix in order to close the gaps created by continuous shortage of healthcare staff (Kushemererwa et al, 2020; Cheng et al, 2022). Quality of care and staff job satisfaction can be attained through optimal skill mix in an appropriate work setting. However, the level of skill mix is dependent on the work environment, patients need and potential future changes. Staff skill mix is a concept that defines the number, education level and experiences of healthcare professionals working in a health institution (Kushemererwa et al, 2020). Organization that adopt efficient recruitment practices are better positioned to assemble teams with diverse skill sets, contributing to comprehensive and well-rounded healthcare services. This will lead to avoidance of the unexpected and undesired consequences of wrong skill mix. Therefore, human resource in accordance with staffing strategy should ensure that right individual with the right skill are hired for the right job at the right time for improved efficiency and quality care services. This process involves certain criteria first, the need for competency-based recruitment to ensure selection of skilled professionals. Second, onboarding processes to promote effective

integration of new hires within an organization. Third, fair recruitment practices, promotion of diversity, efficient recruitment that aligns with the skill sets and providing of adequate information that will influence employee readiness for quality service delivery (Chukwu & Onuoha, 2022). The connection of these factors forms a strong foundation for organizations striving to deliver healthcare services of the highest quality.

Furthermore, consideration should be giving to ensuring fairness in recruitment processes, this is crucial for promoting diversity, preventing biases, and selecting candidates based on merit. Norskov et al (2022) stipulated there is a direct link between fair recruitment practices and the quality of healthcare services delivered. Organizations that prioritize fairness in recruitment are more likely to attract a diverse pool of candidates, promote a variety of perspectives and experiences within the workforce as well as less chance of having conflict with supervisors. Studies indicates that unbiased recruitment processes lead to increased employee satisfaction, which is closely tied to improved performance and consequently, better quality services (Norskov et al., 2022; Nwafor & Odimegwu, 2023). Effective recruitment practices promote diversity in the healthcare workforce, considering factors such as gender, ethnicity, and cultural backgrounds. Diversity enhances the hospital's ability to provide culturally competent care. In addition, it contributes to stability of the workforce by assisting in selection of candidates who are a good fit for the organizational culture and values (Baumann et al, 2021). This, in turn, can reduce turnover rates, promote favourable work setting, job satisfaction and staff retention.

Reward System and Quality Service: A review of literature revealed that some hospitals in Nigeria developed reward policies but uniformity and supposed fairness remains questionable. This creates an environment of dissatisfaction, which hinders knowledge transfer and skill development, essential factors for high quality patient care (Olanike et al, 2025; James et al, 2015).

Conversely, Nnadi & Ede (2023) highlighted that reward has a significant positive effect on healthcare workers performance. Reward system comprises of various processes and practices developed within an organization framework, to ensure effective rewarding of the workforces and for the organization benefit (Niguse & Getachew, 2019). Reward system is a business strategy often used by institutions to entice, encourage and boost the workers' morale towards higher performance and quality service delivery (Emmanuel & Nwuzor, 2021). It is a management tool classified as an accolade given to a staff for exceptional task performance. The centrality of reward system in workforces' morale, satisfaction or disaffection has long been recognized (Olanike et al, 2025). According to (Egbe, 2022; Jeni et al., 2020) reward system is one of the key role of human resource management intended to attract, motivate and retain suitable and talented workforce for an organization. Monetary or non-monetary reward promotes satisfaction and is perceived as a yield given to a staff in exchange for a task well done. Congruently, Uzochukwu et al. (2023) attested that reward system is a vital, unified aspect of human resource management, which is associated with financial and non- financial recompense given to the workers in exchange for defined job or services rendered. Broadly, speaking reward can be viewed as the overall remuneration consisting of fiscal and non- fiscal pay given to a staff in exchange for the services rendered. It is a vital part of contract in a paid job and is acknowledged as an important element in staff motivation strategy and of great benefit for the organizational growth (Ezeanyim et al., 2019; Jeni et al., 2020). The overall purpose of reward system is to support organizational goals attainment through recruitment of knowledgeable and motivated workforce committed to deliver their job with satisfaction and optimal performance (Olanike et al, 2025; Niguse & Getachew, 2019).

Organizational reward system focuses on attracting, hiring and retaining talented, committed and high-motivated individuals at the same time intends to promote positive work behaviour that will effectively contribute to the achievement of set goals. This denotes that a well-organized and effectively implemented reward system has a strategic benefit that will enable firms to engage the services of competent employees with suitable qualification, it promotes high performance in all work related activities, stability and retention of the workforce. These skilled employees with unique capability difficult to imitate will strategically position the company and give them an edge over their competitors. Reward enhances staff job satisfaction, self-confidence, positive work behaviour and the aspiration for greater performance, quality service and higher productivity (Niguse & Getachew, 2019). Organization success and sustainability relies on the participation and engagement of committed workforce in all activities directed towards achieving business objectives. Goal attainment also requires that the workers should conduct themselves in a manner that exhibits good or positive work behaviour as well as adhere to organizational policies and practices. Positive work behaviours promotes organizational performance and negative behaviour has an undesirable effect (Enyina et al., 2023). Despite the great importance of staff in organizational goal accomplishment, employers equally have a major role to play in the transaction process by creating a reciprocal obligation in form of reward system to motivate the employees. Hence, organizations implement reward system as an approach to inspire and encourage staff to work harder in order to become high performers. It creates an avenue for higher quality service delivery, creates a culture where the workforces care much about the organization success and attempt to win an award thus, improving job performance and job satisfaction. Generally, staff are dedicated or committed towards work perceived to have the likelihood of bringing satisfaction and meeting their needs through the reward offered. Consequently, employees feel valued, appreciated

and recognized when organization display their gratitude to staff in an appropriate manner and this increases loyalty, commitment and retention (Francis et al., 2020).

Scholars acknowledged reward system as a strategic tool that positively influence staff behaviours, attitude and work performance. Enemuo and Olateju (2021) emphasized that reward system should be used to implement good behaviours and encourage staff to do the right things which will improve efficiency. It is worthy to note, that inappropriate implementation of reward system could lower the staff morale and lead to negative job attitude, poor performance, absenteeism and high staff turnover (Enyina et al., 2023; Niguse & Getachew, 2019). A well - implemented reward systems underpins staff accomplishment and organization success. This is because effective reward system enforces positive work behaviours, motivates and encourages staff to go extra mile for the advancement of the organization thereby enhancing performance and quality service delivery (Niguse & Getachew, 2019). For example, Hee et al. (2016) emphasized the importance of using extrinsic reward, to motivate nurses who are one of the major contributors to health care with great influence on the performance and quality patient care.

Specific considerations should be given to certain guiding principles on reward system such as equity to ensure employees are treated fairly or justly (Oyefusi, 2022). Internal equity occurs when a staff remuneration is reasonably comparable to other staff within the company and it is often a fixed amount. Whereas, external equity happens when a staff payment is equivalent to other employees in similar job in another organization and this reward is variable contingent on certain standards. This is particularly important because huge discrepancies in different organizational rewards leads to high staff turnover as employees seek to work with organization that rewards better resulting to absenteeism, poor performance and poor quality services. Reward

can also be constructed on individual performances through staff yearly appraisal as stipulated in the organizational policies and for meeting or exceeding expectation (Kehinde & Adeagbo, 2020).

Reward system can be classified as financial (extrinsic) and non- financial (intrinsic) reward with the ability to motivate individuals extrinsically and intrinsically hence; a good reward system should contain both attributes (Uzochukwu et al., 2023). Extrinsic reward provides a form of security for staff and comprises of salary, bonus, promotion and fringe benefits while, intrinsic reward includes recognition, empowerment, praise and learning opportunity. Extrinsic rewards are categorized under monetary recompense and it is a widely used reward system. It comprises of wages, compensation and extra welfares such as health insurance, vacations, company car etc. Salary is considered the highest employee motivation in comparison to other incentives because it has the ability to enable individuals satisfy their fundamental needs of life (Uzochukwu et al., 2023). Staff payment can equally be given in form of overtime, special prizes, allowances, commissions and bonus. Bonus are prizes given to staff in recognition of high or exemplary performance and /or for appreciation for exceeding set target. Furthermore, in order to achieve career progression promotion is crucial, it involves moving an employee from current position to a higher level and it come with more responsibilities, higher pay and a decision- making authority. Employees are greatly inspired by promotion because it increases their job portfolio, sense of ownership and empowers them with decision- making ability and autonomy (Emmanuel & Nwuzor, 2021). Incentive based on performance also referred to as “target attainment” is significant in staff motivation. It entails benchmarking expected staff performance in a clear term and ensuring the workforce understands that goal accomplishment or exceeding of expectation attracts certain reward ((Ezeanyimet al., 2019). Therefore, monetary incentives can serve, as

tangible reinforcement that encourage health personnel's to devote extra effort in delivering quality care.

Intrinsic rewards often referred to as non- monetary or intangible rewards are psychological related recompense considered to be valued experiences obtained while executing operational activities as well as performing job well or above expectation. These rewards could be in form of recognition, respect, development opportunities, achievements, appreciation, and autonomy to determine how to accomplish a task, challenging job, responsibilities, more participation and personal satisfaction (Niguse & Getachew, 2019). Intrinsic reward is recognized as an incentive, which play a vital role in staff motivation, positive work attitude and behaviour, higher performance and better quality services (Tsai et al., 2020). However, realizing enduring motivation requires organization to focus on both the financial and non- financial motivators. The two- reward system provides aid in attracting and retaining of different workforces and distinctively influence their motivation as each plays a different role. This is in accordance with Herzberg's two-factor motivation theory that emphasized employees' satisfaction, job performance with better quality care services (Alrawahi et al., 2020). Francis et al. (2020) suggested that a more comprehensive reward system would create a better and long-term impression on the workforces, which will be a foundation for trust and feeling of being valued. In healthcare, Agbenyegah (2019) suggested that financial rewards influences staff performance positively and significantly, they are useful tools for organizational progress, motivation and satisfaction for staff and quality service delivery.

Generally, reward system facilitates the bond or relationship between employers and employees as organization consists of teams or groups of individuals with different specialties working towards the set goals. The exchange process is an agreement between the organization management and the workforces, which necessitates that each group should keep their own part of

the transaction. The employers are obliged to pay the employees the agreed remuneration as indicated in the contract of employment and the company policies. On the other hand, the employees are required to exhibit decent work attitude that will improve performance and quality service in order to enable the institution achieve success and competitive advantage. Uzochukwu et al. (2023) highlighted that occasionally employees are not enthusiastic regarding upholding of best performance at work or making additional effort outside the confines of their job role to attain excellence or organizational set goals. This can be attributed to staff relating of work behaviour with intrinsic and extrinsic motivation. Hence, the role of Herzberg's two-factor model of motivation becomes vital because motivation is required to create passionate and task oriented individuals. Thus, reward system should not be static but often modified and the effectiveness assessed to ensure it still motivate the workforces with an aim to increase staff satisfaction and performance, satisfied workforces are committed and willing to increase performance (Falola et al., 2019; Hamid et al., 2023).

Teamwork and Quality service: The concept of teamwork can be traced to the origin of man, human as social beings cannot be alone, they are bound to work, form groups or solve problems together and live together (Sari & Pasaribu, 2023). Teamwork is a collaborative and coordinated carrying out of task and activities by two or more people to achieve common goals (Anderson et al., 2020). The bible book of Ecclesiastics 4 verses 9 -12 enlightened us on the benefit of working together as a team with emphasis on "two are better than one". The scripture further demonstrated the advantages of having a companion, as both bring a rewarding outcome for shared effort. When one stumbles, the other can provide support but being alone in times of trouble brings difficulty without assistance. Similarly, two individuals can generate warmth for each other, which is not easy to achieve alone. When faced with an opposition, having a partner ensures resistance,

emphasizing the power in unity and teamwork (Panda, 2022). Studies on teamwork has evolved over the years from sociotechnical model of Trist & Bamforth in 1950s to social psychology of 1960s and 1970s. Organizational culture influences the team behaviour with each other or acceptance; even the overall interaction with patients and these behaviours can hinder or lead to effective operation (Praveena & Fonceca, 2023). Research on teams can be tracked down to the Hawthorne studies of 1920s and 1930s that recognized the significance of association among intergroup within an establishment, team influence on the members and the meaningful impact of informal groups on work conducts (Sujatha et al., 2019). A team is referred to as a group of individuals with different or related expertise who work together towards a common goal having a clear roles and responsibilities (Strode et al., 2022). Team-based care approach strategy enables health professionals from various disciplines to collaboratively provide personalized care to patients in order to meet their emotional, physical, spiritual needs. Its significance lies on the ability to help in improvement of quality care and patient experiences (Nguyen et al., 2020).

In this era, teamwork has marked a significant and visible change on organizational structure and work practices. Several studies have emerged on teamwork with an effort to understand the factors that promote team effectiveness particularly in healthcare (Schmutz et al., 2019). Zajac et al. (2021) in their study stipulated that consistent teamwork and collaboration within the health system are critical for coordination and delivery of quality and safe care. Global businesses environment in this age of advanced technology comprises of groups or individuals with different expertise, knowledge and experiences who join multiple behaviours and approaches to transform inputs (resources) into outputs (services or products), (Bell et al., 2018; Schmutz et al., 2019). Successful introduction of innovative products or services requires mutual efforts of diverse talents who work together to accomplish organizational goals. Teamwork is central to

quality product or service delivery because of enhanced performance associated with group activities.

The significance of teamwork is more evident in healthcare as a result of its complex nature and interdisciplinary system comprising of clinicians of various specialties, patients, families, friends, support and administrative staff requiring effective collaboration among them (Zajac et al., 2021). Teamwork has become a very vital aspect of care delivery and provision of quality care necessitates that different group or individuals should work together. The effectiveness of teamwork as an essential element for group enhanced performance, quality and job satisfaction has been well documented. Nguyen et al. (2020) buttressed that teamwork improves job satisfaction, efficiency, quality and expected outcome. Teamwork creates a positive work environment, contributing to high staff morale that can lead to increased job satisfaction and reduced turnover rates among staff.

Teamwork has been underlined as a vital element to achieving quality healthcare and patient safety (Etherington et al., 2021). Teamwork promotes a collaborative environment where each member contributes their expertise, leading to more efficient and streamlined processes within the hospital. Often patient hospital visit occurs across different clinicians working within the hospital or in different healthcare facility. This requires effective care coordination, optimal and reliable functioning team that are predictors for safe and high quality care (Zajac et al., 2021). Studies posited the benefits obtained through teamwork such as increased patient safety, quality care services, better coordination, quality decision making, more integrated care plans, better ways to handle complex tasks and enhanced patient outcome (Aaberg et al., 2019). Teamwork summarize groups of behavioural processes both the cognitive and affective state that transpire during work practice. These practices involve coordination, communication, psychosomatic

safety, respect, utilization of other individual skills and assisting each other. The team composition shapes the team members' mood either in a positive or negative way and that determines member's conducts towards clients (Bell et al., 2018). Chandrashekar and Mohan (2019) highlighted that there is a proven relationship between teamwork and patient outcomes, stated that well supported and effective team promotes positive work climate, good team spirit and better communication, which leads to high quality care and satisfactory patient experience. Aaberg et al. (2019) further emphasized on the importance of team collaboration and participation in- group decision making as well as involving patients in their treatment decision- making process. Davidson et al. (2022) highlighted the importance of shared decision-making, an organized method for integrating patient preferences and evidences into preventive and therapeutic decision-making. The process permits discussions between patient/families and the health professional in a manner that can lead to an informed decision harmonizing with patient value, need and preferences. This is a major element of effective healthcare process with a likelihood of positive health outcome.

Several scholars highlighted that effective teamwork lead to improved and progressive health outcomes and also support the team members to accomplish much more than they could have achieved alone as a result of manifold efforts, wider perspectives and talents (Bell et al., 2018). This reinforced that for quality enhancement, the providers should adopt an interprofessional collaborative working approach because efficient quality care services can be difficult to achieve through an individual health worker or disjointed professional group efforts (Dinh et al., 2019). Without effective teamwork and collaborative practices high quality delivery cannot be achieved thus, the need to develop and execute interprofessional working approach. The aim is to improve patient safety, the standard of care and patient outcomes. This approach will enable application of holistic care services thereby prevent care fragmentation, improve patient

satisfaction, and overall service experiences. O'Connor et al. (2016) buttressed and suggested that the level of teamwork among the group of healthcare personnel contributes greatly to the health outcome of patients in respect to mortality, medication errors and length of patient stay in the hospital. Correspondingly, inability to communicate effectively has been identified as a risk factor for patients and includes inability to hand over properly, inadequate sharing of information or giving of wrong information. However, effective collaboration and interaction are essential aspect of teamwork. Therefore, creating a collaborative environment and team trainings for the workforce in order to promote teamwork is very important (O'Connor et al., 2016). Good work relationships, an encouraging work environment, shared responsibilities, knowledge sharing, collaborative decision-making, and positive impact of combined group efforts all contribute to improved performances in care delivery.

In order to promote and strengthen teamwork, (Diaz & Dawson, 2020) suggested that “shared mental models, mutual respect and trust and closed –loop communication” are the essential factors. In addition, effective team requires adequate knowledge of the work environment, ability to identify work overload or gaps in practices. This involves willingness to support other team members, appropriate distribution of work load, accepting and respecting other member’s opinion that align with what is in the best interest of patient and organizational goal. Although, Schmutz et al. (2019) recommended that increased workload might make members of a team to forget their collective team role because of work pressure, and unintentionally work on individual task. Yet, (Alkhaqani, 2022; Goh et al., 2020; Khoshnoodifar et al., 2024) suggested that increased medical errors and workload amongst team is linked to ineffective communication and poor collaboration. Indicating, that work overload should not have occurred if there is effective

communication, as each member should have a clear understanding of their role and this makes work activities seamless.

In healthcare poor teamwork could have a negative impact on patient care leading to a decline in quality of service and poor patient satisfaction. Therefore, it is essential to understand some principles that characterize effective teamwork. Creation of a mutual and well-defined goal that incorporates shared interest of all members and reveals collective ownership. Roles, responsibilities, expectations and accountabilities of each member clearly defined. This approach enables division of labour thereby enhance efficiency, improves trust and respect, as each individual understands their role and appreciate each other efforts. In addition, individual beliefs, abilities, professional contributions respected, and diversity of views encouraged amongst team. Effective communication is highly significant for the success of teamwork. Hence, the team should develop and refine its communication dexterity to ensure consistency and accessibility of communication channel to all members. Generating strategy for measuring processes and outcomes through well-timed feedback is essential. It will promote immediate tracking and improving of performance as well as enable creating of future strategies. Effective leadership is vital and will coach, assist and synchronize team activities.

Table 2.1

Advantages of Effective Teamwork

Team	Health Institution	Patient	Staff
Better care coordination	Reduced waiting time	Improved satisfaction	Greater job satisfaction
Efficient use of health resources	Reduced waste and costs	Better health outcome	Enhanced performance

Effective communication	Reduction in medical errors	Improved patient safety and quality care services	Clarity of roles
Interdisciplinary approach	Better quality care and faster treatment	Greater health outcome	Improved well-being
Shared decision-making	Good reputation and profitability	Enhance patient commitment to treatment and confidence on the institution	Promote involvement, loyalty and retention

Despite increasing awareness of benefits of effective teamwork, it is not incorporated totally in healthcare practices and medical education due to non-availability of evidence-based outline (Zajac et al., 2021). This could be attributed to certain challenges and barriers such as training differences, problem solving technique, communication styles, different personalities and professional principles, which affect team interactions and goals attainment (Bell et al., 2018). A program on neonatal resuscitation in an attempt to reinforce teamwork further identified ten useful and recognized behavioral goals essential for promoting teamwork. These are effective communication, leadership, planning, being familiar with work environment, optimal delegation, professionalism, information sharing and clarity of roles (Salih & Draucker, 2019). Similarly, Diaz and Dawson (2022) provided certain commendations to promote effective teamwork and communication by creating an organization teamwork environment through simulation. Simulation offers a safe learning background that enables staff to deliberate through feedback and reflective practices on performance leading to increased proficiency. The literature further emphasized that effective teamwork communication can be achieved through implementation of strong and continuous instructive intercessions rooted in information processing and the behavioral

model of acquiring and retaining talents. This approach is suitable for trainings on vital skills like teamwork and communication that are not technical in nature.

Training & Development and Quality service: The concept of training and development is an essential function of human resource designed to empower personnel with specific abilities to drive enhanced organizational performance, quality, employee job satisfaction and retention. Globally, firm's competitiveness and profitability has been recognized as interrelated to the skills, knowledge of capable personnel, training and development. These are antecedents for staff higher performance (Okoroafor et al., 2022; Zahoor & Muhammad, 2020). Zahoor and Muhammad (2020) further attested this that skills and knowledge of the employees obtained through training are vital source of company's intellectual assets. It backed up the popular phrase "Knowledge is power" formulated by Bacon (Simpson, n.d.) which revealed the significance of knowledge acquisition. Thus, knowledgeable employees are great asset for an institution success. Efficient staff have the abilities, enthusiasm, positive attitude and information needed to create value that will facilitate competitive advantage for the company.

Thus, training and development ensures effective distribution, adequate utilization of existing knowledge, acquisition of new knowledge and sharing of knowledge to the right individuals. It facilitates information flow within an organisation and enables right staff to receive, understand and apply knowledge appropriately in order to achieve set goals and competitive position in the marketplace (Slavkovic & Slavkovic, 2019). Studies has revealed that activities linked to knowledge such as creation, circulation, distribution and application of knowledge are the key foundation for quality, high performance and economic growth (Castaneda & Cuellar, 2020; Yeboah, 2023). Organizations and government attempt to invest in human capital training, education, research and so on to enable them make progress and survive particularly in today's

rapid changing and turbulent business environment. This is crucial because tacit knowledge (within an individual and cannot be duplicated) is embedded in organization practices and culture and provide the unique competences, expertise and knowledge that will enable an organization to distinguish its services in a way competitors cannot easily imitate, leading to competitive edge over rivalries (Slavkovic & Slavkovic, 2019).

Training is the use of systematic and planned instruction and educational activities to promote acquisition of additional skills, which will enable an individual to perform better in the current role or develop /learn a new skill to take on a new task within the firm hence, preparing them for future roles and responsibilities (Ali et al., 2019). Training and development is a process aimed to improve staff knowledge, talents and proficiency necessary to perform workplace function in an advanced manner. It involves attitudes, skill and knowledge acquisition as well as widening and gaining of an in-depth knowledge that will facilitate personal, professional and organizational growth. This construct intends to share insights and knowledge, improve employee's behaviours or nurture attitudes that will enhance quality and productivity. On the other hand, knowledge becomes ineffective when the available knowledge is not shared to the people that will make right use of it. Hence, (Gil-Lacruz et al., 2019; Moudatsou et al., 2020) highlighted the importance of in-service training, which are part of measures put in place by institutions to empower staff and boost their skill to enable them become high performers and thus facilitate satisfaction and quality of services.

The benefit of providing adequate information and ensuring the performance expectations are linked with organizational goals cannot be overstated. For example, when employees have a clear understanding of their roles, responsibilities, and performance expectations, they are more likely to exhibit commitment and dedication. In addition, transparent communication and setting

realistic performance expectations enables higher levels of employee satisfaction and, consequently, enhanced service quality. This era of new technologies and continuous innovation has made training and development for gaining of new knowledge and innovative ability a necessity for excelling and surviving in the business environment (Mgunda, 2019).

Employees are central part of operational health team; they contribute different expertise and perform several function that will promote positive health outcome for patients/ families. However, gaps between education attained by professionals and real practice and services rendered could contribute to numerous challenges. Therefore, recognizing the gaps in skill will possibly assist human resource management to understand the competencies and teachings necessary to create a favourable environment for effective and excellent healthcare. Moudatsou et al., (2020) stated the need to enhance in-service training and development for health personnel is because it will significantly improve the quality of care provided to patients. For example, a training on empathy enables the health providers to better understand and share their patients feeling thereby promoting optimal therapeutic relationship. This was buttressed by (WHO, 2016), specified that training of the health workforce is a vital tool required to minimize medical error caused by gaps in knowledge. It empowers workforce and equipped them with the necessary knowledge, behaviour and skill to perform their jobs effectively, thus improves safety and quality of care.

For example, the current standard practice in healthcare organization is the use of electronic medical record (EMR) for storage of patient's information. EMR has many benefits among which are management and preservation of large volume of patient health records in an electronic format, confidentiality, improvement of quality care, timeliness, accuracy and easy access across many providers (Uslu & Stausberg, 2021). Without adequate training and development, it could be difficult for professionals to cope with these technologies and relying on obsolete knowledge will

have a negative impact on quality of care. It is worthy to note that trained health professionals often provide better care services and are able to handle challenging situations as well as make good recommendations which could advance care quality and practices (Zahoor & Muhammad, 2020).

It is worth mentioning that training and development is extremely important to both individual and organizations. For individuals it enhances staff commitment and job satisfaction particularly when workforce realizes the organization has their personal, professional and career growth in mind by spending for their development. They feel valued and important thereby; strive to contribute significantly to the success of the organization leading to loyalty, sense of ownership, quality service delivery and higher performance (Joao et al., 2019). Training and development equips employees with better decisions making ability, innovative and provides them with a more effective approach toward solving problems. Training further enables organization to obtain “short and long –term goals, increases employees motivation, soft, functional and technical skills” and consequently, create opportunity for promotion and salary increase. It supports and encourage staff to self- develop as well as boost their self- confidence or morale which enables them have better understanding on how to deal with work related stress (Gil-Lacruz et al., 2019). Therefore, training endows the workers with knowledge and work behaviours that will enable them to professionally bridge the gap between client’s expectation and the actual services provided (Abdelhamied, 2019). Jehanzeb and Bashir (2013) established that institutions who train and develop their professional has a reduced percentage of staff turnover, about 40 -50 percent fewer rate in comparison to institutions that do not engage in such practices. This improves quality of services as trained and talented staff are retained as well as provide services in an effective and efficient manner (Joao et al., 2019).

Organization that invest in employee training reaps the reward of higher performance, quality services and profitability. In addition, identified gaps in employees' skill and knowledge are fixed through training; this in turn leads to improvement in performances, improved quality of services, higher productivity and reduced supervision. Training reduces cost for the organization for instance, employees trained on lean management will have an understanding of the topic and when appropriately applied will eliminate or minimize wastage of resources. Additionally, reduced rate of staff absenteeism and turnover signifies cost reduction related to recruitment and selection activities. Training such as customer services empowers staff and equips them with adequate skill and knowledge on how to easily provide individualized services and satisfy clients by meeting or exceeding their expectation. Satisfied clients appreciate staff efforts and quality services, this motivates the workforce which then prioritizes excellent services encouraging better performances (Joao et al., 2019). Satisfying customers' needs are the major aim of healthcare facilities, because satisfied patient/families increases loyalty, health outcome and profitability. In healthcare changing patient's need, diseases and technologies makes it demanding for hospitals to continuously train the workforce in order to meet up with the altering health issues and needs.

Training and development is a crucial tool used by organization to enhance staff performance, job satisfaction, quality services and profitability. The viability of businesses depends on certain set of values that will promote the industry, attract new customers and retain the existing ones. In this era of advanced technology to enhance quality of care, consideration should be given to training and development to boost staff skills/ proficiency, teamwork and support from the management (Wahdaniah et al., 2023). These are crucial elements, which will promote personnel's knowledge, collaboration, inspiration, commitment and morale leading to high quality processes. Hence, effective training and development motivates and supports

workforces to make optimal use of their potentials in the workplace and facilitates further learning opportunities for career development and organizational growth.

Service Quality

The concept of quality has long been in existence and progressed over the years, quality originated as organization strive to meet up with the customers' demand, attain competitive advantage and survive in a complex and dynamic market environment. However, the strategic meaning of quality commenced after the 1970s and 1980s due to increased foreign competition resulting to loss of jobs and market shares by some European and United State-based companies (Dahlgaard et al., 2019). The motivation for modern quality management was generated from the industrial revolution and successes of Japanese firms' epitomized by total quality management (Hamid et al., 2019). The knowledge of Japanese success made other businesses globally to learn and adopt total quality management and today quality is synonymous with success. Total quality management (TQM) model provides organization with a framework that covers all essential aspects needed to achieve excellent quality such as processes, tools, and training an organization required to meet the changing business and customers' (Kashif & Satirenjit, 2021). Thus, the significance of Deming's approach to quality that ensure organization continuously pursue quality improvement activities to provide services that will satisfy end users, enhance employee's satisfaction and the organization improvement with application of 14 points using Plan-Do-Study-Act (PDSA) cycle (Alauddin & Yamada, 2019). Implementation of TQM requires organization's commitment, cultural change within the firm and full involvement of entire workforces as change agents (Snongtaweepon et al., 2020). More than ever before, quality has become a major focus for businesses and customer- centricity is the key as era of product or service centricity has passed. This new approach entails adopting a strategy that positions customers first and at the core of

business to ensure delivery of a positive experience and development of long lasting association (Greasidou & Valachis, 2022).

Service quality has been difficult to define but the two terms service and quality can be described thus; service is an intangible activity offered by an individual or organization to another for its beneficial purpose. While, quality can be viewed as an instrument strategically used by organization to enhance effectiveness, performance and profitability (Ramya et al., 2019). Service organization comprising of private and public firms serve customers in different capacities and customer satisfaction has been noted to depend largely on the quality of service delivered by the providers. The ability of organizations to remain profitable and achieve competitive edge over rivalries relies largely on the quality of services provided and the capacity to influences customer retention (Vu, 2021). Service quality is subjective; it is customer's perception of the service provided based on his or her expectation regarding the service. Hence, when expectations are not met the service could be perceived as not satisfactory, if expectation matches the perception, service will be considered to be satisfactory but, if perception exceeds expectation then the service is considered excellent (Darzi et al., 2023). Therefore, customer satisfaction significantly contributes to organization reputation, credibility, profitability and survival. Additionally, Abdelhamied (2019) stipulated that service quality is the major success attribute in service organization and the perception of customer in terms of whether satisfied or dissatisfied with the service received a factor to determine if the customer could revisit, reuse or recommend the service to others.

Unlike tangible products that can be visually inspected to ascertain the value, services that are intangible, requires the experience and perception of the recipient. Consequently, quality of services can be measured using Gap analysis service measure or Performance measures with the

application of SERVQUAL scale. Ramya et al. (2019) highlighted Gap analysis model based on five gaps assumed to impact customers' opinion of quality from views of various scholars. Gap-1, this concerns the expectation of customers and the perception of the management (knowledge gap). Gap-2 is the specification of the service quality and management perception (standard gap). Gap-3 is the gap between specification of service quality and the actual delivery of service (delivery gap). Gap -4 is ineffective communication and service delivery (communication gap). Gap -5 is the gap between customer expected quality and perceived quality (expectation and perceived gap). While the performance measures consist of soft measures which is referred to as an unobservable part of quality and hard measures, these are the features or attributes that can be seen or measured (Ramya et al., 2019; Vu, 2021).

The gaps analysis is used to determine the gap between where an organization are presently and where they are meant to be or where they intend to be. It helps to identify the areas of defects and areas to concentrate for quality improvement. From the angle of healthcare, Nurmeksla et al. (2023) indicated that similar to other service organizations, patient expectation and perceived perception are equally crucial and forms the academic underpinning of the quality healthcare models. Monsef et al. (2023) similarly underlined the need for continuous gap analysis in healthcare due its complex nature, changing patient needs, technological advancement and emergence of new disease. The approach will help to determine the gap between hospital's current service delivery and the demand for healthcare. Customer's satisfaction and loyalty is dependent on the value attached to the quality of service received.

Quality in Healthcare: Quality healthcare has been a key worldwide challenge as the demand for an effective and efficient health system with high-quality services continues to progress. In the recent years, public awareness and interest has increased on the subject of quality

of care, quality is the essence of care and the heartbeat of healthcare services. Quality of healthcare has been defined in several forms by different individuals and cooperate bodies. Institute of Medicine (IOM) defined quality as the degree to which health services increase the prospect of desired health outcomes for individuals and are consistent with recent professional knowledge (Allen-Duck et al., 2017; Busse et al., 2019). Also, WHO (2022) defined quality of care as the extent to which healthcare services delivered to patients/families improve desired health outcome. Quality of care is the degree of excellence in care rendered to an individual. Despite, its several definitions, the best approach to measure or evaluate quality has attracted lots of attention because of its subjective nature. However, Upadhyai et al. (2019) suggested that quality of care should incorporate the essential domains such as effectiveness, safety and the patient experience of care provided. Conversely, Allen-Duck et al. (2017) indicated the result of care services received determines the level of quality care provided. The expected outcome is optimum wellbeing, which goes beyond total cure but incorporates the psychological, physical and spiritual health of all individuals.

Mohamed and Hameed (2015) postulated that quality in healthcare has gone through several evolution during the past decades, and attempts were focused on improving healthcare quality, safety, and efficiency with the involvement of skilled human resources as the change agent. Ephraim-Emmanuel et al. (2018) indicated that the request for excellent and affordable healthcare spawned from the changing global epidemiology, emerging and re-emerging diseases, demographics, and complexities of health. Thus, World Health organization framework, known as the building blocks, concentrated on how to strengthen global health systems. These building blocks includes service delivery, healthcare personnel, medical products, information, finance, and leadership. Despite various innovations and strategies, there remains slow progress in building a

health system that will effectively promote collective quality health improvement, especially in sub-Saharan Africa (Oleribe et al., 2019).

The society expectation regarding healthcare services are ever increasing and several surveys, reports, policy document, newspaper and journals consistently highlight problems in healthcare delivery related to underuse, overuse, or misuse of care as well as inefficiencies (Upadhyay & Opoku-Agyeman, 2020). Healthcare facilities aim to provide high quality care that is safe, efficient and results to positive patient experience/outcome. Nevertheless, sometimes healthcare can be unsafe and patients entrusted in the care of professionals unintentionally harmed. Studies and reports from the Institute of Medicine in United State of America and the Department of Health, United Kingdom have long drawn attention to the continuous unsafe practice in health systems worldwide. Rajkamal (2019) stated that Hopkin report estimated about 250,000 patients' death yearly in United State as a result of medical errors. In the UK report on medication error rose to 508, 409 with 12, 000 deaths per annum (Aghighi et al., 2022). Hence, the urgent need for professionals, policy maker and authorities to recognize and accept the necessity for change. Sorato et al. (2020) postulated that some healthcare organization as a reformation strategy adopts trends such as efficiency, quality and equity, which involves the use of initiatives such as outsourcing of services, quality enhancement and fairness in the delivery of care. There are some different initiatives linked to various programs that can improve quality of care as well as contribute to better patient outcome. These approaches include risk management and error prevention, complex adaptive systems, evidence based medicine, organizational development and leadership enhancement, patient empowerment and professional development. Although, no quality improvement program is superior to the others but, occasionally several approaches might

be implemented together. Perhaps consecutively as there is no single best approach to achieving and maintaining quality improvement in healthcare.

The origin of quality improvement in healthcare can be traced back to the time of Florence Nightingale, an English nurse in 1850s during the Crimean war. The period witnessed marked reduction of mortality rate among soldiers associated with infection from 42.2% to 2% within six months (Tomasich et al., 2020). Nightingale implemented some specific quality improvements measures such as “the reduction of overcrowding by spacing beds three feet apart, provision of adequate ventilation and warmth, ensured cleanliness by making sure the gutters were cleaned regularly, horses removed from the hospital basement and latrines disinfected with peat charcoal”. In addition, ensured noise was reduced to the barest minimum, implemented hand washing standard, routine change of bed linen, use of clean water, sterilization of surgical instrument (Sheingold & Hahn, 2014). It is worthy to note, that these approaches are still highly substantial in quality concept today bearing in mind the great value of hand hygiene and its significance in the recent Covid- 19 pandemic. Quality is one of the most important aspect of health services and a reputation for quality is an invaluable asset to possess.

Quality improvement can be defined as better patient experience and outcomes achieved through changing provider behavior, systematic change methods and strategies (Russ et al., 2022). Inadequate workforce has a negative effect on the quality of care, and despite health providers’ intention to provide safe and excellent care to individuals, yet occasionally and unintentional harm does occur. Unsafe health care has been recognized to be a recurring worldwide challenge thus, reducing harm and promoting patient safety is a priority in healthcare (Konlan & Shin, 2022). Studies have been conducted in order to understand the causes, consequences and potential solutions to this problem of unsafe practice such as overuse, underuse and or total bypassing of

care (Upadhyai et al., 2019). Unsafe practice causes and solutions have been noted to lie in the systems of care inclusive of the processes, professionals and technology. This is in accordance with IOM definition of quality care, which stated the relevance of available current professional knowledge and technical performance among the health workforce (Upadhyai et al., 2019).

However, the rising incidence of error and threats requires health providers to continuously adopt measures to promote quality in delivering healthcare. In addition, the increased number of medical negligence lawsuits, high number of medical errors and the realization that human can make mistakes lead to continuous quality improvement in healthcare. Mobasher (2022) emphasized on the rising interest of health facilities on quality improvement program with an aim of attaining patient satisfaction. This was associated with the increased rate of lawsuits over clinical malpractices and societal consciousness of quality care and the intense competition in healthcare industry and active regulatory bodies. Alenezi et al. (2022) underlined the persisting issue of quality in healthcare notwithstanding a concentrated attempt over the past decades. This concern are related to non-uniformity of quality definition, which they assumed to be the hindering factor due to different individual views of high quality. Although, different initiatives aimed at improving the quality of care and patient safety are ongoing yet, preventable harm and adverse occurrences are still prevalent and unreported (Lancaster et al., 2022). The institute of medicine (IOM) in 1999 introduced “To Err is Human” and that marked a turning point in patient safety (St. Pierre et al., 2022). Thus, the awareness that errors are costly, preventable, and safety and quality can be improved led to many organizations embracing certain approaches in an attempt to minimize error and adverse events. Efforts to promote safe and quality healthcare requires constant quality improvement process, which is a proactive approach. This entails working in conjunction with quality assurance, imbibe the process of implementing corrective actions or measures to deal

with the recognized gaps in patients' care using appropriate quality healthcare services standard and practices (Amurao et al., 2023). Previous studies have concentrated on quality construct "SERVQUAL" the most widely used tool for evaluating the gaps in-patient and the provider interactions during a visit. These gaps mostly relate to patient expectation, the perceived quality of care received from the care providers, and these are based on five service quality-underlying elements such as tangibility, reliability, empathy, responsiveness and assurance (Ramya et al., 2019).

In healthcare, application of continuous quality improvement measures are part of Deming's quality assurance processes that promotes patient experience and clinical outcome. Thus, Amurao et al. (2023) defines quality assurance as a methodical and planned approach to continuously monitor, evaluate, and enhance healthcare quality using available resources. The approach encompasses setting of standards and assessing individual, group, or organizational performance against those standards. According to Faybishenko et al. (2021) quality assurance consist of three components and they are; define quality, improve quality and measure quality. Quality assurance is crucial in healthcare because it ensures better and high quality health services are provided, an aspect of quality management that concentrates on ensuring quality requirements are completed (Faybishenko et al., 2021). Continuous follow up on quality services enables staff to remain up-to -date and be cautious to avert errors. It reveals the areas of weaknesses in hospital management and provides immediate solution, amends care delivery regulations, reduces medical errors and monitor compliances (Amurao et al., 2023). Quality assessment is a phase in quality assurance that involves comparing of performances against expectations, standards, and goals to recognize opportunities for enhancement. This assessment is not an act of imposing solutions or corrective action rather it depends on various available metrics based on organization preference

to determines outcome (Endeshaw, 2021; KhanMohammadi, 2023). Assessment utilizes reliable evidence or data to measure the degree of quality and satisfaction of patients' needs in accordance to approved benchmarks. When assessing the quality of a specific healthcare intervention with reliable data, it is vital to highlight achievements, deficits, and opportunities for comparison across various healthcare domains, such as programs, systems, resource allocation, and practitioner efficacy. Overall, quality assurance consists of assessment and the corrective measures taken to address identified shortfalls based on outcome of measurements with an aim to improve or maintain quality. Therefore, Braithwaite (2018) proposed that quality improvement should be attuned to organization features with a good feedback loop that will help to drive change among the members thereby making quality improvement an organizational culture.

Health Workforce Related Challenges to Delivering of Quality Care: Several decades ago, quality of healthcare was limited to the available health facilities, medical knowledge, qualifications of the staff and equipment obtainable. Upadhyai et al. (2019) highlighted that the health providers determine the care services provided with little or no consideration on patient preference or input. As time goes by, knowledge and the quest for quality services increased following various research by scholars, government and agencies as the cases of medical errors increases. Patients began to voice out dissatisfaction and health organizations in an attempt to meet patient expectation and satisfaction adopted different quality models to measure the level of care provided for example SERVQUAL (Endeshaw, 2021). However, the tool mostly concentrates on patient perception and satisfaction as well as the health institutions or management but with minimal attention to the health workforces.

The quest for quality healthcare has become a continuous process because quality is an integral and inextricable part of every individual and the nations. Allen-Duck et al., (2017, p. 5)

cited Institute of Medicine described “quality of care as the degree to which health services for individuals and populations increase the likelihood of desired health outcomes based on evidence-based professional knowledge”. Agencies and scholars such as (AHRQ, 2018; Akinwale & George, 2023) recognized certain gaps and challenges to quality healthcare which are mostly associated with the health workforces. This was associated with recognition of the importance of health human resource and their role in quality care delivery. Failure to provide quality of care can have harmful effect on health outcome with a likelihood of negative consequence on an individual quality of life or may lead to death. Unfortunately, many sub-Saharan African countries are still overwhelmed with health human resource shortages and scholars has forecasted shortage of about 6 million staff by 2023 across the continent (Sheffel et al., 2022). It is noteworthy that studies undertaken over the years in Nigeria focused mainly on leadership, funding and infrastructures with an aim to improve quality of care but the situation remains fairly the same. This is because most of the research fail to put ample consideration on the satisfaction and motivation of healthcare workforces who are the drivers of quality care services (Jimoh et al., 2022). Hence, greater attention to health workforce should help to gain an in- depth knowledge and understanding of what motivates workers as well as the factors that contributes to their job satisfaction which is an enabler for high performance and quality service delivery. To this end, the Nigerian health system requires employees’ management strategies that consider job satisfaction a significant element underpinning quality service delivery, growth, staff development and retention.

However, it is crucial to identify potential issues which (Maphumulo & Bhengu, 2019; Nkhwashu et al., 2023) identified as challenges or factors that could possibly hinder or limit application of quality care services thus, the need for an approach that will help to address these challenges. This study concentrates on the challenges associated with health human resource,

which consists of all individual specifically clinical staff that participate in providing care to patients. Some of the identified challenges are shortage of staff and heavy workload, the work environment and working condition, inadequate motivation and incentive and ineffective teamwork. These factors are discussed below with possible suggestions on how to deal with the challenges.

Shortage of Workforces, Burnouts and Heavy Workload: Healthcare has witnessed dearth of skills and qualified workforces in the recent years. De Vries et al. (2023) stressed the global challenge associated with health personnel shortages. The increased demand for high quality care relies on the capable workforces with physical and psychological balance, engaged, well supported and valued. Shortage of competent health workforce compromises quality of care and raises patient safety concerns with increased workload and higher burnout (Mahdavi et al., 2023; Vogt et al., 2024). Zapata et al. (2021) described burnout as a stress syndrome associated with constant exposure to work pressure that can lead to emotional and physical symptoms such as tiredness, inefficiency, depersonalization and pessimism. Consequently, results to reduced success, compromised quality healthcare, medical error and low patient satisfaction. Shortage of competent and talented health professionals are often associated with factors such as poor motivation, inadequate compensation packages, unconducive work environment and lack of other fringe benefits. Leading to endless migration to the developed nations in search of fulfilling and lucrative jobs. Ogbeivor and Ogbeivor (2021) stipulated that a study by United Kingdom general medical council conducted in 2018 advocated the rising incidence of workload and long working hours among doctors at NHS. This resulted to demotivation among the workforce with thoughts of possible change of career, early retirement or resignation from NHS. Work related stress often leads to demotivation and illness resulting to low quality healthcare, dissatisfaction or low

satisfaction for patients and staff, absenteeism and high turnover. Blstakova and Palencarova (2021) postulated on the significance of satisfaction and motivation of health workforces, which promotes staff stabilization as well as help to reduce the high staff turnover, enhances quality of care and the overall performance leading to improved patient health outcome.

In addition, staff shortages have a negative influence on their real-world training for example, in the hospital in-patient department where the consultants usually educate the newly qualified doctors using the current disease condition on the ward at that particular time. Acute staff shortages make this form of teaching burdensome and does not support the transition to a learning organization. To further exemplify, in-site training for nurses based on the procedure at hand might be hindered as a result of shortage of nurses, the senior nurse may be overwhelmed, and struggling to ensure timely care is provided to the patient hence, insufficient time for teaching the younger nurses. This invariably, have a negative impact on knowledge sharing, information dissemination, effective communication and interaction.

The major outcome of shortages is inadequate staffing resulting to heavy workload for the available staff, possibly with a poor staff- skill and skill- mix, and this has been revealed to have a negative impact on the quality of care (Orukwogu & Kue, 2022). AHRQ (2018) stressed on the increased rate of unsafe medical practices, which jeopardizes patient safety. These can lead to quality issues such as service overuse that results to excessive use of some service not necessarily required thus, leads to increase in the cost of care. Service underuse, which is inability to provide the needed services thereby putting the patient in danger of unnecessary complication, or mortality that could have been prevented. Misuse of services resulting to medical errors such as medication errors, delayed or missed diagnosis.

Often these errors are associated with long working hours, burnouts, inadequate rest and other stressors associated with heavy workload. Hansel et al. (2024) underlined the severity of job related stress on health workers and its detrimental effect on quality care delivery, patient safety and the overall performances. The scholars identified some of the stressors as heavy workload, burdensome work policies, unfavourable work environment and working condition, occupational exposure and job insecurity. Hence, provision of safe, quality and patient-centered care requires both physical and psychological wellbeing of the workforce who are the major players in quality healthcare delivery. Merga and Fufa (2019) demonstrated and highlighted on the negative impact of high workers' turnover, burnouts and low job satisfaction, which are associated with heavy workload on quality of care.

The work environment and working condition: The effect of work environment and working condition on staff performance and their influence on quality of healthcare has become a significant public health issue. Several authors (Hansel et al., 2024; Sabra et al., 2022) stressed on the significance of positive or healthy work environment in attainment of safety for patients and staff, quality care and positive health outcome for patients. This implies that work environments play a vital role in safeguarding health and safety of the workforce and consequently promotes desirable efficiency level. Unhealthy work environment does not incorporate practices that promotes staff well-being, quality of patient care and optimal performance. The recent Coronavirus pandemic revealed the high dependency of humanity on health workforces; the challenges of shortage of health professional and the work related stress and fatigue health workers confronted regularly (Zhan et al., 2020). Therefore, employees require favourable work environment that support quality care service for them to operate maximally (Sabra et al., 2022). Studies has shown that health workers are often exposed to different stress factors, ranging from

physical or verbal abuse, workplace bullying to emotional fatigues and burnouts. All these contributes to low morale, poor job satisfaction, high staff turnover, low performance and poor quality care services (Odole et al., 2023; Saparniene et al., 2023). A healthy work environment enables staff to work harmoniously to attain health institution set goals, patient and job satisfaction using their expertise and knowledge (Sabra et al., 2022).

Furthermore, the working condition can influence employees' motivation, performance, and the wellbeing, this effect can be either positively or negatively depending on the overall work condition. Several studies indicated that high rate of attrition among health professionals are related to challenges such as inadequate staffing, long work hours, high workload, insufficient or unavailability of consumables, medical supplies, medications and non-functionality of crucial equipment (Attah et al., 2023; Korang-Yeboah & Buobi, 2021). A work environment that consistently experience delayed arrival of essential resources, unavailability of important consumables or non- functional equipment poses a huge challenge to quality care delivery (Hamid et al., 2023). Insufficient resources (consumables) such as gloves, facemasks, hand sanitizers to mention a few jeopardizes safety thereby exposes patients and staff to cross contamination and other infections. Another major challenge is unavailability of medical supplies such as VBG machine, nimbus air mattress, stethoscope and others as well as inadequate supply of medications like antibiotics, anticoagulants or other vital medicines. Additional work environmental impediment to quality service is power outage, worst during the nighttime; this obstructs free workflow, leads to lift down time and hinders emergency diagnostic investigations and other life-saving treatments.

A review of literature highlighted the problem of work environment and poor working condition in African government owned hospitals. Carbajal et al. (2020) emphasized that South

Africa is confronted with inadequate human and physical resources, in terms of equipment and health professionals resulting to excessive workload for the limited workforce and inadequate functional equipment and resource to provide efficient and effective care. Similarly, healthcare in Tanzania, Malawi and Ghana are challenged with insufficient workforce, lack of essential work tools, work overload and poor working environment leading to frustrations, demotivation, high rate of staff turnover, low performance and compromised quality care services (Akinwale & George, 2023; Cheng et al., 2022; Zhang et al., 2020). Reports in Nigeria highlighted poor working condition, unfavorable work environment, poor remuneration, inadequate lightening, lack of updated equipment, acute shortage of health personnel, unavailability of consumables and other work resources (Blomberg & Welander, 2019; Opiah et al., 2022; Saparniene et al., 2023).

Failure to have access to these essential resources puts much strain on the workforce especially nurses who are the front- liners in patients care delivery. For example, they may be confronted with the dilemma of evenly distributing limited stocks or possibly withholding certain treatment and offering it to an individual in critical need thereby compromising quality by endangering the lives of other patients. The constraint imposed by lack of essential physical and human resources undermine provision of quality care, hinder professionals from delivering quality care of which they are trained to (Hamid et al., 2023). Consequently, resulting to undue pressure leading to loss of experienced healthcare professionals, demotivation, decreased job satisfaction, low performance and poor quality services. A study by Eche et al. (2022) specified the importance of healthy work environment and good working condition on the workers' intent to stay on the job, improve performance and quality care delivery. Unfavorable working conditions and the related risks often lead to staff distractions and alienation, ultimately unhinges optimum care services delivery and staff retention.

Inadequate Motivation: Motivation is an emotional reaction that results to satisfaction in an individual and motivation can be (intrinsic) within an individual for example willingness to attain or (extrinsic) external factors such as remuneration (Uzochukwu et al., 2023). In healthcare staff, motivation plays an integral part in quality care delivery. Akinwale and George (2023) identified job satisfaction as a motivator that enables the workforces to focus on the task and help reduce clinical errors and promote positive health outcome by provoking constructive work behaviour among staff. There is need for the workforce to experience a high level of job satisfaction and be delighted in carrying out their task. However, (Abate & Mekonnen, 2021; Ogbeivor & Ogbeivor, 2021) suggested that lack of effective communication, lack of appreciation, lack of opportunity for career development and inadequate reward system leads to dissatisfaction and poor motivation among professionals. Akinyemi et al. (2022) confirmed that most Nigerian health workers migrated overseas due to poor motivation and lack of job satisfaction. Motivation is a driving force whether intrinsic or extrinsic that propels the workforce towards quality care delivery or attainment of organizational goals. Extrinsic reward offers staff job security and includes remuneration, allowances, promotion, bonus and other welfares, which are essential for meeting individual basic need such as accommodation, transportation or other living costs whereas; intrinsic reward are non- financial and consists of empowerment, recognition, praise and opportunities for learning. They are mentally related reward considered useful experiences gained during functional activities, good performances or ability to exceed expectation.

A review of literature (Jaeger et al., 2018) stipulated the effect of assumed lack of recognition on staff performance in a hospital setting. The workforces feel demotivated for not being appreciated or recognized for their contribution and efforts in providing care and often workforces are confronted with inadequate basic work resources such as consumables or materials

for effective care delivery. Despite, the limited resources staff attempts to provide optimal care within their capacity thus, lack of appreciation by the management or line managers are one of the major demotivation elements especially with the high workload associated with staff shortages and long work hours. Ogbeivor and Ogbeivor (2021) illustrated the negative impact of lack of motivation among health workers; as it leads to dissatisfaction, low job performance, low quality care services and high cost for health organizations. Similarly, a report from NHS UK revealed that staff felt dissatisfied and discontented due to sense of being undervalued or lack of recognition, which is in line with Herzberg's motivation theory (Wilson & Simpkin, 2019).

In the Nigerian health sector, (Okafor et al., 2022) underlined some negative consequences of demotivation on health workers and they include emotional conflict, lateness to work, dissatisfaction, absenteeism, poor quality care service and high staff turnover. Therefore, it is essential to implement intrinsic and extrinsic reward as both helps to attract and retain workforces and individually impact staff motivation in specific ways. For example, some individuals derive pleasure from intrinsic reward; their motivation comes from inherent passion for what they do while, others are motivated by extrinsic reward such as financial reward. Thus, to build or establish an inclusive and strong reward system that recognized the importance of effective and balanced reward system will assist to address the existing challenge. Daniyan et al. (2021) highlighted that involvement of staff in decision-making, training, effective communication between staff and management builds a healthier and long-lasting relationship between employers and employees, which enhances organization competitiveness, performance and profitability. Jeetoo and Jaunky (2022) posited that low compensation or wages has been recognized as a demotivating factor that often prompt health workers to emigrate to developed nations that can offer higher salary. In the Nigeria health sector, there are claims that lack of satisfaction and

motivation among the professionals provokes constant emigration to places where they can have a better reward system (Akinwale & George, 2023).

In addition, knowledgeable and competent staff is an asset to health organization, skill improvement through training and development endows employees with extra ability to excel, as well as grants the organization competitive edge over rivalries (Zahoor & Muhammad, 2020). The workforce performance reflects level of skill acquisition through training and thus the total organizational performance. Training and development is significant for improving employees' commitment and job satisfaction particularly when the organization spends money for staff development. The employees feel appreciated and important as they recognize the organization have interest in their personal, professional and career growth. Thus, knowledge improvement or acquisition of new learning leads to higher performance and quality care services because the workers feel motivated and have increased self- esteem leading to higher organization profitability (Gil-Lacruz et al., 2019; Joao et al., 2019). Training and development also provides staff with better decisions making ability, innovative ideas and improved problem solving techniques. On the other hand, when staff are dissatisfied or demotivated, they are unlikely to provide quality care services and will not be willing to exceed expectations (Merga & Fufa, 2019).

Ineffective Teamwork: The complex nature and a multidisciplinary approach of healthcare comprising of clinicians with various specialties, patients, families, friends and other ancillary staff makes teamwork a crucial part of health system. Teamwork has been recognized as a vital element for collective and improved performance, quality services, competitive advantage, physical/mental wellbeing and job satisfaction for the team members (Chandrashekar & Mohan, 2019). Job satisfaction is associated with the collaborative nature of teamwork because of mutual interaction and knowledge sharing. However, Zajac et al. (2021) emphasized that despite the growing

awareness of the benefits of teamwork, it is not incorporated fully in healthcare practices and medical education. Bell et al. (2018) ascribed these limitations to differences in training, communication styles, personality's differences, methods for solving problems and professional ideologies that, is believed to disrupt good interactions amongst team as well as goals accomplishment.

A lack of effective teamwork will create negative work climate, disunity, interprofessional collaboration and poor communication, which will deter quality care and lead to unsatisfactory patient experience and poor outcome. It impairs effective communication, creates friction and distrust and makes knowledge sharing impossible thus, leading to high risk of errors. A review of literature revealed that avoidable medical error are associated with lack of teamwork and other human factors, which hinder effective communication and collaboration (Costello et al., 2021). Lack of collaboration often obstructs communication and sharing of current knowledge that could have been beneficial in achieving desired health outcomes thereby reduces the quality of treatment. The consequences are medical errors, substandard care, preventable deaths and complications for patients and low reputation for the health institution

Despite the overall aim of teamwork, which is for success attainment, teamwork can be rendered ineffective due to related key human behaviours that may exist among the group. Some of these social behaviours are referred to as aggressors, blocker, withdrawers, recognition seekers, topic jumpers, dominators and devil advocate and are discussed below (Akhmad et al., 2021).

Aggressors are critics and strong pessimist; they condemn every suggestion or anything said within the team setting. Aggressor through deflation of other team member status creates a sense of intimidation on them and that enables him or her to block the introduction of new ideas

or new views. This behavior when unchecked lessens the team's overall motivation and consequently member participation.

Blocker have an overriding or dominant personality and do not accept other member viewpoints or perception. This individual does not allow for team brainstorming and having discussion on the benefit of new ideas suggested. Similar to aggressor, blocker has a damaging effect on the team effort as he or she bullies team members, restricts their contribution and involvement as well as lowers team morale, participation and inspiration.

Withdrawer are those that hold back personal involvement and will not want to be an active member of the team rather passive in a team environment. This member concentrates the team to his or her immature behavior and attempts to resolve the conflict and unrest it creates, which effectively limits the team's ability to make progress on problems and assigned projects.

Recognition Seeker are attention seekers and in so doing, dominates the conversation by constantly emphasizing his or her individual thoughts, proposals and perspectives. This individual attempts to gain all the member team over to his or her views thereby reduces other member contribution and hinders entire team involvement, participation and motivation.

Topic Jumper demonstrates little attention span and repeatedly disturbs group discussions through different efforts aimed at changing the subject. A topic jumper is unable to explore any issue extensively and the impact of this persistent interruptions or disturbances leads to reduction on team efficiency because team are distracted and kept off-focus.

Dominator exhibits intimidating and aggressive behaviour within the team setting. This individual practices threatening and abating conduct in an effort to take over the team and control all discussions. The dominator will get control of the team through pressure for his or her own agenda.

Devil's Advocate is a member that provokes different perspectives into the team discussion with a positive team purpose, supporters of devil advocacy suggest that it enable team to reflect and deliberate over issues from diverse angles in order to avert providing untimely answer to problems. However, it can be a negative role when used to stop team progress or harmony thus, the devil's advocate does not permit the team to advance (Akhmad et al., 2021).

Thus, it is crucial to identify and address appropriately those social behaviours with a potential to impede effective teamwork.

Overcoming the Challenges to Quality Care Delivery: In view of the ongoing healthcare worker, shortages and burnouts there may be need for organization to develop and implement strategies to motivate, retain and incentivize workforces in order to drive optimal quality improvement Motivation and engagement of the healthcare personnel are required to maximize the quality and effectiveness of patient care. Motivation is a drive or force that prompts or directs an individual to carry out certain activities or behave in a particular manner. Bogren et al. (2020) stated that the main principle of motivation recognized that performances are determined by level of individual capabilities and motivation. In this current healthcare business environment, ability to remain competitive and thrive requires dedicated and committed employees. These workforces require good mindset, skills and time with consideration to their busy schedule for optimal function and be healthy to provide quality care to patients. Therefore, determining the employees motivating and demotivating factors is fundamental in ensuring continued high quality care delivery, staff retention and improved organizational performance. Hospital management should endeavor to address staff shortage by recruiting adequate number of health workers. This will mitigate against heavy workload and long working hours in addition, introduction of flexible

working hours and payment of overtime may help to compensate staff and increase motivation (Ogbeivor & Ogbeivor, 2021).

A study conducted by (Anku et al., 2018) identified that reward is a strategic tool which positively influence staff behaviours, attitude and work performance. This implies reward can increase an individual motivation and satisfaction. However, the level of satisfaction relies on the variance between the expected recompense and the actual remuneration received by an individual. On one hand, inability to reward appropriately could result to low morale and dissatisfaction for staff. Thereby, leads to bad attitude or behaviour in the workplace or anything considers to be a threat to positive work environment or culture such as absenteeism, rumor mongering, high staff turnover and low performances (Anku et al., 2018; Daniyan et al., 2021). Generally, effective reward supports positive work behaviours, job satisfaction, collaboration, and commitment as well as motivates the employees to improve performance and quality service delivery (Adegbite, 2019; Niguse & Getachew, 2019). Although, reward is essential, what motivates two individuals may vary in consideration to intrinsic and extrinsic reward. A health professional that is intrinsically motivated has an innate passion to assist and provide care to patients in need and that bring a sense of fulfilment, thus any form of monetary reward does not always move such staff (Ge et al., 2021). Therefore, providing a thank you card or a commendation letter to a staff for high performance will enhance intrinsic motivation of such individual. This will help to meet and boost employee's self- esteem and self- actualization thereby providing an intrinsic reward that can improve performance.

On the other hand, for extrinsically motivated health worker the use of high salary or an expected salary can be an effective technique to attract and retain the staff. In addition, implementation of promotion as a monetary reward is recognized a strong motivation. Promotion

often goes with increase in salary and it is equally perceived as a career advancement which meets staff self- esteem and self- actualization needs (Afolabi et al., 2018; Ogbeivor & Ogbeivor, 2021). The overall effect is that employee will be motivated due to the monetary reward and that prompts satisfaction leading to high performance and quality care services.

Furthermore, the changing nature of healthcare, technological advancement, ever-changing patients demand and preferences necessitates the need for continuous quality improvement in order to cope and meet patient's health needs. Thus, training and development is paramount for human resource the greatest organization assets and the key drivers of profitability and quality. Equipping these employees for this significant role requires training, which has been identified as an essential and widely deliberated subject in global businesses (Alharbi & Aloyuni, 2023). The complex nature of healthcare demands that health institutions constantly shape and modify their employees' behaviour to align with their respective roles as well as equip them with the right skills, knowledge and competence. Training and development is a crucial tool to enhance staff performance, job satisfaction, quality services and productivity. Zahoor and Muhammad (2020) specified that failure to train the workforce could lead to decreased efficiency, knowledge, poor job quality, unacceptable work behaviors and attitude with an increased rate of staff turnover, absenteeism, medical errors and poor job satisfaction. Healthcare worker's ability to make decisions and handle lifesaving situation is dependent on the level of expertise and proficiency.

The concept of quality of care cannot be actualized without knowledgeable workforces therefore; consideration should be given to training and development, which has the potential to boost staff skills, proficiency, work behaviours and attitudes. These vital elements further help to promote the workforce's knowledge, teamwork, commitment, motivation and confidence thereby, leads to higher quality service delivery. Effective training and development supports and

encourages the workforce to make optimal use of their potentials as well as facilitates learning opportunities for career development and organizational growth. According to Rosen et al. (2018), there has been an increased awareness of repeated unsafe practices and harms to patient in care. Some of these harms are patient fall, errors associated with wrong diagnosis, medication errors, and hospital acquired infection (HAIs) and surgical errors. However, adequate and essential training for the workforces may possibly help to prevent or avoid most of this harm (Kennedy et al., 2023). Training is the efforts made to provide the right information, knowledge, and skills to the workforce to equip them with the competency required for their designated task. The goal is to improve existing capabilities, effective work behaviour and prepare individuals for future high-level job that require more responsibilities and higher competence level (Gil-Lacruz, 2019). For example, there is need for ongoing in- service training to enhance the existing skills and acquire new knowledge especially in clinical context where exposure to real life situation is a daily occurrence despite, the vigorous medical education and trainings undertaken to attain the required skill and knowledge to meet the standard of professional practices.

In addition, ensuring commitment among health workforces should be the target for healthcare quality improvements. Since the attributes of work environment and working condition has a dominant role that influences employees' performance and output, attention may be channeled towards addressing the challenges that impedes healthy work environment and working condition. Hensel et al. (2024) recommended considering well-being and work-life of workforces as the priority next to improvement of the work environment. Thus, ensuring a balance on both the wellbeing of employees and the work setting will help to address issues such as burnout, stressors and others. Hospital management and decision makers should imbibe the culture of providing the necessary work tools for high quality services. This will enable health personnel to concentrate on

delivering of optimal care services without shifting attention to the complexities of procuring or sourcing for work instrument thereby causing unnecessary delay in providing care. Those distractions could potentially lead to medical errors as well as cause excessive strain on the workers with a resultant emotional and physical fatigue particularly, when accused of malpractices by patients and families. Subsequently, the results are loss of interest on the job, poor performance, high turnover, absenteeism and poor quality care services.

Likewise, effective team work should be promoted and encouraged as it leads to better and positive health outcomes as well as enable the team members to achieve more than they could have achieved if they work alone because of multiple efforts, broader viewpoints and skills (AHA, 2022; Bell et al., 2018). Scholars proposed that patient health outcome which can be in form of medication errors; mortality, full or partial recovery and the length of time patient spent in the hospital are associated to the degree of collaboration between the team of health professionals (O'Connor et al., 2016). Similarly, ineffective communication has been identified as potentially major source of risk for patients and could be in form of inadequate patient handover, insufficient information sharing or wrong information. Thus, (O'Conner et al., 2016) highlighted effective communication and collaboration as the most important element to teamwork. This implies that deviation from applicability of both in practice will lead to adverse event in quality care delivery. Thus, effective communication amongst team should be encouraged for improved teamwork, leading to higher satisfaction level for patients and staff, workload reduction and less stress in the work place. Therefore, it is essential for organizations to create a team environment and team trainings for staff in order to promote teamwork. A strong culture of collaboration results to better patient's outcome, patient involvement in plan of care, effective communication, improved safety and cohesion amongst team. It promotes supportive work environment, transparency and happier

patients hence, team working is fundamental to health institutions enduring success, patient safety, job satisfaction and retention.

Nevertheless, the presence of negative and destructive roles can aggravate ineffectiveness of a team and that can hinder the team's ability to function optimally, despite the existence of positive and constructive team roles. These negative roles can arise due to various factors such as personal agendas, resistance to change, immaturity, and lack of motivation or effective team leadership and management. It is crucial for leaders to closely monitor members of the team and identify any detrimental behaviors. When such issues arise, leaders should support the team to jointly identify and resolve them amongst themselves within the setting. If these efforts prove unsuccessful, leaders must take decisive action with the individuals involved. However, leaders should remain observant for signs of negative roles and behaviors within their respective teams.

Overall, achieving an efficient, effective and high quality healthcare is possible if health institutions pay attention on the issue of staff motivation. However, there is need to consider and address other human resource related practices and multifarious factors with the organization context.

Human Resource Management and Quality Healthcare

Healthcare industry in the recent time has faced human resource challenges due to shortage of health personnel associated with increasing population, longevity and aging workforces. World Health Organization (WHO, 2015) postulated that one of the greatest investment of any government is to ensure the citizens are in good health and this could be accomplished with the help of health workers with special consideration to availability of health workforce in this era of shortages. To meet up with the huge demand, human resource management

(HRM) over the past decades has undergone several transformations as health institutions strive to succeed and survive in the highly turbulent, technology driven and competitive business setting (Zhang & Chen, 2023). The traditional personnel management that is the process of managing people within an organization has been replaced by the term HRM. The concept of HRM integrates workforce into strategic management using policies, philosophies, processes and practices to support talent management, knowledge management and promote conducive work environment. Strategically take measures to evaluate and meet the future demands of the workforce, encourage skill development, provide learning, development opportunities and job satisfaction (Wahdaniah et al., 2023).

Hence, the modern HRM is responsible for ensuring efficient and quality services delivery through recruitment and retention of talented, knowledgeable, committed and motivated workforces. In order to facilitate quality service and achieve the company's set goals or objectives HRM adopts modern practices to attract and retain the best people (Khassawneh & Mohammad, 2021). Furthermore, on the concept of contemporary HRM practices (Adegbite, 2019) illustrated that organizations adopt effective communication, decisions delegation at various levels, reward systems associated with performance indicators and other practices to facilitate greater performance. These HRM practices involves a process of attracting, developing, motivating, and retaining of the workforce for effective operation and survival of an organization. The practices are conceptualized as policies and techniques internally designed and put in place to guide the workforce towards organization goals attainment. HRM practices have a direct or indirect connection to service quality and positive outcome, and quality is an antecedent for business survival (Blstakova & Palencarova, 2021; Najam et al., 2020).

Thus, a lot of attention has been focused on quality as a result of globalization, fierce competition, diverse employees, technology and changing clients' demand and preferences. The healthcare industries like every other business are challenged by intense rivalry characterized by expenditure growth, increased patient expectations and satisfaction (Varanasi & Tiwari, 2022). There is a consensus that quality service is an indefinable, ambiguous and immeasurable concept and (Mitchell et al., 2019) attested that quality healthcare has several dimensions relating to the service organization. However, to overcome this ambiguity, researchers proposed some models for better comprehension of the construct. Hence, (Ramya et al., 2019) considered service quality in terms of reliability, responsiveness, assurance, empathy and tangibility as well as a strategic tool that enhances efficiency of operation and performances. Ramya et al. (2019) emphasized that service quality is the capability of service provider to improve performance in order to satisfy customer expectation in an effectual way.

Similarly, (Gishu et al., 2019; Gore et al., 2022) illustrated that the patient's perception of processes through which expectations are compared to a particular service received. Therefore, service quality is esteemed to be high when performance meet or exceed patient's expectations and low when performance do not meet expectations. Overall, service quality descriptions concentrated on the fact that it should meet the needs and expectations of clients. In this context, expectations are based on standards, beliefs and needs of an individual, which is a point at which quality is perceived and judged (Ashraf et al., 2021; El-Haddad et al., 2020; Yusefi et al., 2022). This is very subjective as expectation may vary between two individuals even when services received are similar. Indicating that quality of care has different meaning to diverse individuals or stakeholders engaged in care whether they are the care providers or the receivers of care.

Nevertheless, driving towards quality requires significant changes in the attitude of the workforces and the management who are the key players, this necessitates that both the employers and the staff should understand the defined organization strategies and accept their responsibilities (Fulop & Ramsay, 2019). Different studies revealed the critical and dynamic role of HRM practices in healthcare quality attainment and it can be view as a system implemented by institutions to enhance employees' retention and improve quality care services (Habtoor et al., 2016; Mobasher, 2022). Similarly, Habtoor et al. (2016) affirmed that HRM practices play a major role in quality care implementation and competitive advantage through staff training and career development. Hamadamin and Atan (2019) opined that strategic HRM practices are the processes put in place to attract, motivate, and retain personnel for provision of high quality, competitive advantage and organization survival.

In order to deliver a business optimum quality services, an effective HRM that will ensure availability of experienced staff with the right skill mix is required. Workforces are integral parts of functioning health teams and each member contributes different skills and performs diverse functions. They communicate and understand patient health needs, transform, improve and innovate the services to meet each individual care need and preferences. Zapata et al. (2021) emphasized that proper management and development of the employees enhances quality health care service delivery. Therefore, effective execution of HRM practices, understanding of the vital role of talented staff and their potentials are instrumental towards gaining of competitive advantages, high quality services and success (Chams & Garcia-Blandon, 2019).

Human resources (staff) constitutes the largest and most essential organization asset, implying that trained employee could competently use other available organizational resource to attain quality and competitive advantage. Aranha and Venkateswaran (2020) demonstrated the

immense benefits of employee training and development; it does not only lead to attainment of quality service and high performance but enhances staff job satisfaction, patient satisfaction and the overall business growth. Additionally, HRM oversees employees' and organizational development by implementing programs that will advance interaction and collaboration amongst staff (Zajac et al., 2021). Hence, the specific practices, philosophies, policies and procedures related to HRM are designed for the purpose of attracting, improving, inspiring and retaining of the workforce in order to help drive the organization towards objective attainment (Nafari & Rezaei, 2022). Human resource management also help to mitigate future challenges through adequate planning to ensure required short, medium and long term staff are available to avert sudden and acute shortage which could potentially impair or disrupt organizational service delivery. This is in line with (Bourgeault et al., 2019) on the challenge posed by inability to plan the right skill mix and staffing in Canadian healthcare considering the critical role of health workers in meeting the fluctuating patient demands and health needs.

Quality is the essence of care and satisfying the patients' care needs the major aim of healthcare facilities, this is because satisfied patient/families increases the hospital quality care rating, profitability and patient health outcome. Since, quality could be attained and sustained through motivated and well supported health workforces. Therefore, recruiting and retaining trained, skilled, competent, loyal and committed staff, who understands the hospital work culture and the meaning of quality care delivery is a necessity for success. Hence, the need to reduce high staff turnover, shortages, heavy workloads, burnout and avoidable stress among staff to enable them perform maximally. In addition, promotion of teamwork, special incentive for high performers, training and development as well as making staff motivation and satisfaction a vital management culture.

The link between human resource management practices and quality of care has been recognized as well as its positive impact on the organization health (Aranha & Venkateswaran, 2020). In healthcare, hospitals intend to provide quality and safe care to patient/families create positive patient experience, good reputation, success and survive, and these could only be accomplished through talented and experienced workforce. The significant role of quality care in patient satisfaction not only boost competitive advantage, but leads to improved medication and treatment adherence, follow- up attendance and enhanced quality of life (Majeed et al., 2021; Seabury et al., 2019). Notably, the rise and fall of any business is on the hands of human assets equipped or not equipped to manage the financial capital and other organization resources in order to turn inputs to outputs. Therefore, it is crucial for health institutions to create a quality culture that makes quality service improvement a daily and routine activity and not a laborious task within an organization. Hospital management should also enhance the belief of quality by providing supportive work environment and good working condition that will motivate staff towards quality service delivery. In addition, effectively and strategically implement the identified human resource management practices that will enable the personnel to deliver quality care with ease.

Empirical Review

This segment analyzes previous studies on human resource management practices and quality services from different research literatures. It also examines the findings and perspective of the scholars on how HRM practices drives quality services with an aim to scrutinize and provide a different ideology that will progress the topic of study.

Akinwale & George – 2023: “Personnel brain-drain syndrome and quality healthcare delivery among public healthcare workforce in Nigeria”. The aim was to investigate the “brain-drain syndrome” among Nigerian healthcare workers in the public health sector, how it relates to

quality of healthcare as well as identify factors that drive brain drain and healthcare quality. The authors emphasized on the need to provide different viewpoints on quality of care for better outcome hence, the importance of exploring the syndrome of health worker's talent- drain. Elaborate description of quality and its significance as defined by several scholars were presented. However, in the Nigerian context the scholars illustrated that quality care delivery is consistent provision of quality service without bias to all patients with consideration to the individual psychological, physical, spiritual and social health. The authors further analyzed quality from technical, interpersonal and facility components incorporating the hospital setting, professional skills, competences and processes to ensure positive patient outcome (Akinwale & George, 2023).

The methodological approach was cross-sectional diagnostic survey using pull and push theory and the world theory. A diagnostic research design was employed to evaluate the study, the target population are medical personnel working in four government hospitals in Lagos state thus, and a statistical analysis measure was used to determine the sample size. A probability random sampling technique was adopted to select the participants to ensure generalizability. A battery of inventory scales consisting of "the physician Job Satisfaction Scale (JSS) and the quality healthcare delivery scale were adapted" and used for the measurement tool. All the adapted scales were put together into one measurement tool and responses generated with the use of Likert 7 point with a sample of 450 participants.

Structural equation modelling using AMOS and artificial neural network (ANN) was used for data analysis. The study made a significant finding that revealed poor quality of work life, poor job satisfaction and low remuneration as the major predictors for brain –drain among professionals. The poor work like quality makes it difficult for staff to put in their best especially when their safety is in jeopardy. The authors used the previous Ebola outbreak as an example of safety concern

for health workers. In addition, poor working condition, poor job satisfaction, lack of recognition, effective reward system and autonomy were identified as demotivators that brings about dissatisfaction to the workers thereby, promoting incessant travelling among professionals in the country. Finally, the scholars indicated that the candid justification for mass migration of health employees in Nigeria is poor reward system, which has led to series of strike actions in the past. The results of the above factors manifests on the health personnels as lack of interest in the job, poor performance, poor quality service and poor health outcome.

The findings illustrated high continuous migration of knowledgeable health workers to the western countries leading to poor healthcare delivery. This was associated to poor work-life balance, unconducive work environment, poor reward system, job dissatisfaction and insufficient work equipment.

Thus, the scholars suggested that Nigerian government should endeavor to provide favourable work setting and excellent work life for health staff. Provide an attractive reward system and other fringe benefits, promotion of research, provision of grants. In addition, the global health governing bodies should enact a law against mistreatment of health workers with possible sanction and penalties for countries that failed to adhere to set guidelines. The aim is to remind government on the importance of good working condition and work environment for their health workforces, as well as to ensure appropriate implementation (Akinwale & George, 2023).

The strength of the study lies on the use of large public health institutions sample (n=450) with direct implications for Nigeria's service delivery. Furthermore, it has a wide methodological scope that combined artificial neural network good for prediction and SEM AMOS for theory testing thereby providing harmonizing evidence. Notwithstanding, the study limitation is on the

sampling precision. Although, probability sampling was stated, but field procedures strata or frames were not well specified, creating vulnerability to selection bias.

Despite, the marked advance made through this study using several government health institutions on the reasons for talent drain and quality of care, it worthy to note that there remain identified gaps. Attempt to address quality of healthcare in Nigeria requires a more extensive approach that will investigate both quality of care and specifics human resource management practices that will motivate and empower the workforces towards quality delivery hence, another practical justification for this current study.

Mohamed & Hameed – 2015: Mohamed & Hameed (2015) investigated “The impact of human resources management on healthcare quality”. The study explored how effective human resource management (HRM) can influence quality healthcare services in order to attain patient satisfaction. Provision of different types of incentives and motivation for healthcare workers has been established to enhance staff performances and attainment of the set goals. In addition, HRM practices promotes organizational development and growth by enhancing the communication and collaboration skill among staff as well as conducive work environment that will support high performance and productivity.

The study used descriptive methodology to review existing publications (secondary data) without any primary data. Mohamed and Hameed (2015, p. 604) defined human resource management “as a system of activities and strategies that focus on successful management of employees and working staff inside the organization to achieve the goals of the organizations”. However, the scholars stipulated that there are diverse definitions of human resource management but concluded there is no definitive definition. Rather the concept is perceived as an enigma and researchers relate it to organizational workforce including the strategies and activities to manage

them. On the role of human resource management, they analyzed it in two functional areas comprising of operative and managerial functions. Operational roles involve to obtain, develop, reward, motivate and integrate staff while, the managerial role include to plan, organize, direct and control. The authors equally examined the responsibilities and the effectiveness of HRM practices in attainment of quality healthcare. The efficiency of HRM should be related to its ability to influence positive work behavior on the workforces and to energize them towards contribution of high-level performance and quality in order to achieve organization set goals. The scholars further emphasized the benefit of staff motivation, incentives and favourable work condition. Inadequate or lack of the above mentioned variables leads to job dissatisfaction, resulting to decline in retention rate of staff and consequently, low performance and low quality care service delivery.

The study findings revealed that human resource management has a positive impact on the employees' performances and the quality of care rendered. Thus, the scholars suggested development of incentive and reward system to encourage and motivate staff to improve performance and quality. They further mentioned the importance of employee's training and development that enriches the workforce knowledge on the concept of quality leading to better performance and higher quality healthcare. There is need to respect and protect every individual right during the process of reformation. Hence, health organizations should strategize their structures, guidelines and policies in a way that will empower the workforce to become more committed and loyal. There is need to concentrate on the activities that promotes job satisfaction, high performances and reduction of staff turnover as well as augment the workforce motivation in order to achieve efficiency. Management should appreciate staff for task accomplishments and fulfillments because such act motivates and often leads to growth.

The strength of this study is on its ability to clearly address the relationship between the studied variables as well as provide a combined overview of previous findings, which help to outline the significance of human resource management. However, the shortcomings is based on methodological constrained. The study relied on existing literature not on primary data such as surveys or interviews to support findings. In addition, the study is not connected to a specific healthcare context hence; applicability to particular level of hospital remains unconfirmed.

Thus, justification for the present study is partly on the scholars' conclusion that the failure or success of healthcare institutions in some developing nations is due to much emphasis on funding, restructuring of health infrastructures etc. with little attention on how to attract, develop and retain healthcare workers. The authors pointed out that there is inadequate research on HRM in the area of healthcare quality, which potentially will affect global healthcare strategy development and reform if not addressed (Mohamed & Hameed, 2015). Furthermore, recommendation was made on conducting future studies using quantitative approach to evaluate specific HRM practices and quality healthcare components to ascertain the relationships in real hospital settings.

Oduwusi- 2018: Oduwusi, (2018) investigated “Human Resource Management and Its Impact in Healthcare Services in Nigeria” with an aim to provide recommendations on how to improve patient healthcare quality through effective human resource management. Nigeria health system has been in shambles and challenged by shortage of health professionals such as doctors and nurses. The scholar underlined that poor human resource management practices, neglected health system, poor working condition and insecurity are amongst the contributing factors.

The study design is descriptive involving review of literatures around human resource management practices such as recruitment, compensation, performance appraisal, training and development, as well as human resource (HR) planning with no primary data collection.

The findings indicate that effective human resource management in health promotes care quality and organizational commitment. Recruitment supports hiring of skilled workforce, HR planning promotes adequate staffing, good recompense systems enhance motivation and retention, training and development promotes knowledge acquisition. The study suggested routine performance assessment for head of HR, strengthening health workers skills through training, addressing staff reward system to improve motivation and retention.

The strength of the study lies on a broad literature review. While, the limitations are based on unavailability of sample, hence no data or methodology for evidence synthesis. There is ambiguity in claims that there is a relationship between human resource management and quality improvements without establishing causality.

It is a conceptual overview, but insufficient as empirical evidence hence, a justification for this current study. In addition to the recommendation for further studies to understand human resource management and patient quality and safety in the Nigerian context.

Onikoyi, I. A., Oluwfemi, S. O., Odumeru, J. A., & Odeh, C. D. – 2023: Onikoyi et al. (2023) examined the “Impact of Human Resource Management Practices on Employees’ Behavioural Outcomes in the Manufacturing Sub-Sector of South-West Nigeria”. The aim of the study was to determine the level at which HRM practices such as performance appraisal, reward management, recruitment, occupational health and safety, career growth and development, training and development influence employee behavioural outcomes consisting of motivation, competence, job satisfaction, commitment, compliance, cooperation with management and colleagues.

This is a cross sectional survey research, stratified, random sampling technique was used, and data collected from 400 mid-level managers from 13 manufacturing companies in Lagos state, Nigeria. Therefore, 381 well completed and valid questionnaires were analyzed using structural equation modelling (SEM).

The findings revealed that the HRM practices determine and predict the examined employee behavioural outcomes with significant variation among the variables.

The strength of the study lies on the use of reasonable sample size and sampling approach, which is satisfactory for structural equation modelling. In addition, the use of stratified random sampling strengthens representativeness within the studied manufacturing population. There is Reliability evidence indicated with the use of Cronbach's α value reported for scales acceptable to excellent (lowest ~0.80) level, indicating internal consistency of measures. However, the limitation is on sample generalizability because the sample is limited to middle-level managers in Lagos manufacturing company.

The scholars recommended that organizations should combine all the studied variables, as they are likely to have broader positive outcome on competence, cooperation, presence and satisfaction. However, suggestion was made to prioritise occupational health and safety, and career growth because these elements emerged as significant predictors for cooperation and co-worker outcomes particularly in manufacturing where safety and career pathways substantially affect attendance and engagement. Further recommendation was on extend samples to include different employee strata and geographic regions in future research.

Despite noticeable progress made through the study, there is need for further evaluation to determine the association between HRM practices and quality healthcare at the hospital level with the inclusion of different levels of healthcare professionals.

Zaiter, Koabaz, Lakkis, Chahine & Zaiter – 2021: “The Relationship between the Human Resources Management Functions and the Quality of Health Care at Private Hospitals in Baalbek- Hermel Governorate”. The study examined the relationship between human resource management HRM practices consisting of compensation and benefits, performance appraisal, health and safety, training and development and the quality of healthcare in private hospital. The scholars stated that high quality services and other benefits attained from the care services rendered to patients are the most significant aspect of the health system and that is contingent with the degree of abilities, knowledge and motivation of the workforce. In this era of health quality awareness and high patient/ families’ expectation, providing quality services is the major key to patient satisfaction and profitability. The scholars recounted the high incidence of death in Boston -United States in 1994, which was associated with complications from an overdose of chemotherapeutic agents to cancer patients and these medication errors, clearly reflected the functions of health personnel’s in quality of care. No wonder the authors further reported Kampala declaration in accordance with the World Health Report for health workers emphasizing the significance of special consideration to retention of efficient staff who are the backbones of the hospital quality services. Therefore, in the face of twenty-first century work force shortages underlined that the core approach for recruitment and retention of skilled healthcare personnel depends on effective HRM practices (Zaiter et al., 2021)

This mixed method (quantitative and qualitative) research study collected primary data using Likert- scale questionnaires from 160 healthcare professionals randomly selected from five diverse private hospitals in the Baalbek district. Secondary data was collected from articles, websites, and books found in the reference section. The method of data analysis was descriptive and correlational.

The findings showed that HRM practices positively influence quality health care service delivery and each identified practices does so at a marginally linear correlation. However, training and development and performance appraisal presented stronger relationship with quality compared to reward and safety measures (Zaiter et al., 2021).

The strength of the study is on the inclusion of different cadres of health workers that enhances the representativeness of the selected participants. However, the authors revealed that one of the study's shortcomings was inability to access the hospital quality data in order to compare it with the survey findings.

As basis for justification, the authors recommended future study using larger participants in a public healthcare setting. The study revealed that recruitment and selection as well as training and development has an enormous positive influence in quality service implementation (Zaiter et al., 2021). The study further determined that there is need to expand the study in order to rule out cultural issues related to area of study particularly, being a private health facility. Therefore, public hospital (tertiary institution) was selected for this research due to its ability to incorporate individuals from different cultural background. The scholar's also suggested involving patient's feedback and input in an attempt to establish the quality of healthcare services. Additionally, it is not clear which theoretical approach that was implemented for the quality examination hence, the basis for adoption of a model that will enable better exploration, understanding and analysis of the study (Donabedian quality of care model). Thus, the study did not fully elaborate quality findings and it is on this background that the current study intends to expand on the knowledge using a more robust approach to fill up the identified gaps.

Allen-Duck, Robinson & Stewart – 2017: Allen-Duck, Robinson & Stewart (2017) examined “Healthcare Quality: A Concept Analysis”. The study aimed to clarify the concept of

quality healthcare despite the undermining public trust globally. Focus was based on attempt to add to knowledge by providing a more collaborative and effective approach to improving quality care. The authors stated the importance of eradication of factors that impede quality improvement practices that began during the era of Florence Nightingale. There has been increased concern over the safety of healthcare provided to the public and this led to an ongoing effort to recognize and implement better tactics and practices to a higher quality services delivery. Healthcare quality services has been widely accepted as a panacea to unsafe medical practices. Hence, globally, different initiatives and strategies has been put in place to improve quality of healthcare. Despite these efforts, (AHRQ, 2018) stated that healthcare quality continues to deteriorate as revealed by several quality indicators leading to a decline on trust the community has in healthcare institutions and the professionals.

Data collection was through secondary method generated via general and medical dictionaries, different websites, and five academics databases. The study adopted concept and thematic analysis for review of 87 articles retrieved through a systematic literature search from five academic databases ranging from 2004 to 2016. Furthermore, the study publications comprised of different research designs such as exploratory, experimental, descriptive, systematic reviews, qualitative and case studies. For example, qualitative research design was used for three articles to measure specific themes, which are connected to the lived meaning of quality healthcare such as relationships, communication, respect and empathy. Exploratory, descriptive and case studies used to measure team planning, sharing of knowledge and patients' perspectives. These three approaches provided the measures and significance of quality healthcare. Experimental design and systematic review helped to defines different ideas used to evaluate quality (Allen-

Duck, 2017). On the other hand, using only five academic databases might limit the database search.

The established concept analysis provides a systematic and transparent approach that strengthens the study. The study equally provided the framework that will facilitate measurement of quality indicators. It provided useful guidance for testing of existing theories or development of theories. Despite, the contributions of the study, the literature search restricted to five databases could limit the authors' ability to obtain relevant data from the omitted sources. The study is constrained by methodological limits (e.g., selection biases) and a lack of integration with widely used frameworks (such as Donabedian) or practical validation.

The scholars proposed future study to include patient outcome in order to provide greater knowledge that will enhance better quality and evidence based care. Allen-Duck and colleagues further stipulated that structure, process, and outcome measures are the quality indicators used in providing quality overview by the National Healthcare Quality Reports (Allen-Duck, 2017). Thus, linking conceptual model to operational measures, broader sources, and empirical testing would strengthen its utility for policy, measurement, and practice. Hence, the justification for current research that intends to combine structure, process and outcome in an attempt to generate significant knowledge that will promote high quality healthcare services delivery.

Habtoor, Zumrah, Disomimba & Samad – 2016: Habtoor et al (2016) examined the “Effect of human resource management (HRM) practices on service quality: job satisfaction as a mediator variable”. The study examined the mediating role of job satisfaction in the link between HRM practices and service quality. The human resource management practices such as compensation, recruitment and selection, performance appraisal, training and development are among the selected factors that boost job satisfaction.

The study applied survey method with the application of questionnaires to 50 participants and adopted descriptive statistics, Correlation and Cronbach's Alphas analysis to interpret the data. The findings indicated there is a positive correlation between the studied constructs. The variables namely the HRM practices, job satisfaction and services quality exceeds the Cronbach's alpha acceptable value (Habtoor et al., 2016). The study used regression analysis to confirm the substantial positive link between HRM practices and service quality. Similarly, the finding also revealed that HRM practices impact job satisfaction in a positive way. Overall, Habtoor and colleagues suggested there is an association between HRM practices and service quality, which is expedited by job satisfaction supporting the study hypotheses. The study recommended designing of human resource using the selected practices in order to promote customer satisfaction and customer service excellence.

The strength of the study lies on the use of surveys that enables collection of respondents' perceptions and test of mediation. However, shortcomings noted was the use of small sample from a hospitality industry, which is not extensive and may be difficult to generalize the findings. In addition, the use of cross-sectional, single-source data and basic mediation tests makes the findings to be considered suggestive rather than conclusive.

The study recommended prioritising HRM practices that can enhance employee competencies and motivation these includes training, fair reward, recognition, and empowerment). In addition, regular evaluation of staff job satisfaction as an early indicator of service quality risk.

Theoretical Framework

The aim of this review is to identify and evaluate various theoretical framework related to human resource management (HRM) practices and quality healthcare services in Nigeria. Theoretical framework is the basis of a research study from which knowledge is built. It serves as

a blue print for the study and comprises of selected theories appropriate to the field of study (Heale & Noble, 2019). The two key concepts for this study are HRM practices and quality care services. The first construct HRM practices consists of four sub- constructs namely recruitment, teamwork, reward system, training and development. These sub-constructs are examined under motivation theory rooted in Herzberg two- factor theory of motivation also referred to as motivation –hygiene theory. The second construct, quality healthcare was evaluated with Donabedian quality of care model.

Herzberg two-factor theory of motivation: During the 20th century, staff well- being was of great concern due to the psychological issues related to staff, which led to increased fatigue and high turnover thereby, hindering organizational growth (Litchfield et al., 2016). Mathisen et al., (2021) highlighted on the negative impact of high staff turnover to a company's competitiveness, performance and productivity. Several studies have been conducted in the previous decades regarding the underlying factors and staff job satisfaction. It was on this foundation that psychologist Frederick Herzberg conducted his research during the late 1950s. The intent was to understand the financial, organizational and personal factors that motivates staff leading to job satisfaction or dissatisfaction (Alrawahi et al., 2020; Mitsakis & Galanakis, 2022).

The concept of motivation has gained increased attention globally as one of the determining factor that drives employees to high performance, personal and organizational goals attainment. Kalogiannidis (2021) affirmed that motivation is a crucial pillar in creating quality system and attaining business success. In this era of fierce competition, the desire of every industry is to be successful, make continual progress and gain competitive edge over rivalries and this requires committed and motivated workforce. Scholars recognized the significant role of human resource in achieving organizational objectives and posited that companies rely on inspired and competent

employees for provision of high quality services, creativity, innovation and productivity (Adegbite 2019; Bogren et al., 2020). Motivation is multifaceted, concerned with people behaviours and may be regarded as a drive or desire that triggers individual to act (Uzochukwu et al, 2023). It could be described as the degree or level of employees' willingness to uphold effort towards achieving the company set goals. Peramatzis and Galanakis (2022, p. 973) defined "Motivation motivation as something that energized individuals to take action which is concerned with the choices the individual make as part of his or her goal-oriented behaviour". Motivation is the power that guides, influences and sustains certain individual behaviours. Hence, when a course of action is expected to lead to a valued reward and goal accomplishment with a resultant satisfaction, people are often motivated. Motivation is a means of generating high degree of passion amongst employees by satisfying their individual needs to enable them achieve organizational objectives.

There are many theories of motivation that directly or indirectly influence the workforce's performance, behaviours and job satisfaction and they are categorized into content and process models of motivation (Rhee, 2019). The Content models consists of Maslow's Hierarchy of Needs, Herzberg's Two Factors Theory, McClelland's Theory of Needs and Alderfer's existence, relatedness and growth (ERG) Theory (Acquah et al., 2021; Rhee, 2019). These models concentrate on what motivates individuals based on what they feel is needful to them in life. Therefore, understanding people needs and desires can help recognize how and why they are motivated. On the other hand, the process models focus on human psychological and behavioral processes. The knowledge of these processes could help to understand the interactions, activities and contexts that inspire people's behaviours and how it leads to satisfaction. Process model comprises of Skinner's reinforcement theory, Vroom's Expectancy Theory, Adam's Equity Theory and Locke's Goal Setting Theory (Acquah et al., 2021; Bandhu et al., 2024; Rhee, 2019;

World of Work Project, 2019). Although, there is slight variation amongst the theories but they are interrelated as they all play a role in promoting employees satisfaction. However, no single theory can fully describe what and how individuals are motivated or what demotivates hence, each theory serves as a foundation for developing a motivating system that could best work for an organization (Acquah et al., 2021; Peramatzis & Galanakis, 2022). This denotes that motivational factors could vary among individuals as a result of the differences in human needs/preferences, likes and dislikes, characteristics, personal experiences and what inspires people to act as they do. Hence, what motivates an individual or team might not have similar effect on another in terms of the level of satisfaction but the underlying theories behind motivation remain universal (Rybnicek et al., 2019).

According to (Trivedi, 2019) Maslow's Needs Hierarchy is a popular content model of motivation based on hierarchical individual needs and it assumes that individuals' aim to satisfy their basic needs first before other higher needs. Looking at the hierarchy, the lowest bottom need is physiological which entails getting an income for upkeep. The next level is safety and security, which stands for a safe work environment and protection. Safety and security is important for decent living and career development but not as critical as the physiological needs. The third level is belonging needs and it constitutes a well-organized work setting with supportive management and colleagues. Fourth level is self-esteem need is recognition for hard work through promotions or awards; this will make them to feel appreciated. Failure to attain this need leads to demotivation, inferiority and helplessness. The fifth and the topmost level on this Hierarchy is self-actualization, which constitutes the highest cadre in Maslow Hierarchy of needs, it drives an individual to attain full potential and fulfillment (Acquah et al., 2021). However, not all the hierarchical levels might

be fulfilled for satisfaction to be attained, rather with a part satisfaction from one level an individual could still seek for satisfaction from another level.

On the other hand, the concept of Herzberg two- factor theory established in 1959 was based on the assumption that certain factors, which lead to employee job satisfaction, could lead to dissatisfaction when they are deficient. The theory indicated two factors that influence staff job satisfaction, are motivators and hygiene factors hence; threat to any of the factors can increase dissatisfaction or decrease motivation (Peramatzis & Galanakis, 2022). These motivators are intrinsic factors related to job satisfaction and consist of recognition, achievement, responsibility, the job itself, promotion and career growth (Peramatzis & Galanakis, 2022). On one hand, hygiene factors are extrinsic work conditions, which could lead to dissatisfaction if they are deficient. These factors are remuneration, personal life, supervision, association with colleagues, policies and procedures, status, security and other fringe benefits (Giese & Avoseh, 2018). Herzberg reported that hygiene factors alone do not lead to higher levels of satisfaction or motivation, but their absence leads to job dissatisfaction however, the presence of both motivators and hygiene factors at work enhances job satisfaction, performance and profitability. A study from Giese and Avoseh (2018) affirmed Herzberg's notion that staff who are satisfied with their work go extra mile, exceed expectations, go beyond the assigned duty and are better performers.

Contrarily, various factors such as ineffective recruitment process, poor management approach, unfavourable working condition, poor remuneration, lack of motivations, inadequate training and development and job insecurity have been identified as the reason why staff leave one organization for another. Thus, job dissatisfaction often results to increased absenteeism, burnout and desire to search for alternative job, which lead to high staff turnover. Increased staff turnover has been recognized to negatively impact service delivery and the overall health of the company

causing monetary strain which is associate with recruitment and training of new staff. Recruitment and training of new staff cost more than it does to train the existing ones. In addition, it intensifies undue pressure on the remaining workforce leading to burnouts, absenteeism, and low performance and reduced perception of positive workplace (Mahdavi et al., 2023). Thus, Mathisen et al., (2021) attested to the negative impact of high staff turnover on organization performance, quality, productivity and profitability. Herzberg posited that firm's management must ensure they met the workers' hygiene factors in order to reduce dissatisfaction effectively.

Herzberg theory was buttressed by studies from scholars such as Maslow 1943, Mayo 1946 and McGregor 1960 (Alrawahi et al., 2020). Maslow assumes that workforce motivation depends on satisfying each individual hierarchical needs as they seek to advance to higher needs contrary to the traditional rewards system of motivation. Mayo's theory equally argues that the aspect of motivation with reward and punishment are outdated rather established that employees value autonomy and social relationship and connections. Similarly, the research of McGregor affirmed Mayo and stated that good employee and employer relationship, adequate supervision, responsibilities, rewards and autonomy result to improved productivity. The three theories from the above- mentioned scholars harmonized with Herzberg's two- factor theory. However, Herzberg's hygiene theory and Maslow's first three needs in the hierarchy are similar and indicated that these elements do not create motivation rather provides a conducive work environment and removes dissatisfaction which could result by not having those needs fulfilled (Alrawahi et al., 2020). Herzberg recognized that extrinsic factors do not motivate but intrinsic factors, indicating that motivation comes from within an individual not externally. Therefore, by applying the motivators such as recognition or sense of achievement, promotions an employee can become more committed, happy and loyal, as well as perform their job satisfactorily (Alrawahi et al., 2020;

Karaferis et al., 2022). In healthcare sector, motivation has been recognized to influence job satisfaction leading to increased performance, quality service delivery and employee retention. Similarly, poor working condition and poor salaries can create dissatisfaction. This is consistent with Herzberg hygiene or extrinsic factors that obtaining staff motivation requires a positive work environment (Alrawahi et al., 2020).

Healthcare is labour intensive and highly competitive hence, ensuring adequate motivation and satisfaction for the workforce is a crucial element for quality care service and survival. The level of staff satisfaction or dissatisfaction may influence patients' satisfaction or dissatisfaction with the services delivered. In an effort to motivate personnel's, hospitals have adopted different tools both monetary and non-monetary, which fall within Herzberg's two-factor theory. Some of these are effective teamwork, good management/employees relationship, job security, performance based reward and wages, trusting and good working relationship with colleagues, suitable work environment, supervision, responsibilities and appreciation, personal and career development (Acquah et al., 2021). Despite, numerous benefits and the important role of employees in business success, staff retention has become an arduous task in the business environment. Analyzing approaches that will facilitate workforces' effectiveness, retention and quality service delivery in Nigeria brings to light Herzberg two-factor theory, a major motivational theory in psychology which has been applied to examine what motivates individuals to work because there is a scarcity of existing literature on healthcare professional motivation and quality care in Nigerian. This is highly significant as the motivation of healthcare workforces plays a vital role in overall quality of work and organizational performance.

Herzberg two-factor theory elucidate that a staff at work could experience satisfaction and dissatisfaction at the same time because the intrinsic and extrinsic factors operate in discrete

sequences (Alrawahi et al., 2020). To illustrate, hygiene factors (extrinsic) can only affect the level of individual or group dissatisfaction but could not increase or decrease satisfaction. On the other hand, motivational factors (intrinsic) and hygiene factors should synchronize in order to attain satisfaction at work thus, prevents work dissatisfaction (Acquah et al., 2021). On one hand, Maslow's theory of motivation could be considered parallel because the needs on the bottom of the hierarchy must be met before focusing on the higher needs. However, these needs are not rigid and an individual could concentrate on diverse line of needs due to variations in internal and external circumstances thus, certain needs can be met at any given time (Gawel, 2019; Trivedi, 2019). Inability to provide suitable and anticipated extrinsic motivators will create dissatisfaction and reduce motivation amongst the workforce. Implication for practice requires healthcare management to understand the correlation between motivational and hygiene factors in attaining job satisfaction and averting job dissatisfaction. Alrawahi et al., (2020) suggested in agreement with Herzberg's theory that jeopardy to safety issues among healthcare workers is a major source of job dissatisfaction while, salary is a motivator, but tends to become a dissatisfier after some time. This implies that these factors make or mars productivity and the quality of care provided by the professionals. This finding is consistent with previous studies regarding the health workers' dissatisfaction due to unconducive work condition and poor remuneration (Akinyemi et al, 2022; Akinwale & George, 2023; Sabra et al, 2022).

A literature review regarding Herzberg's theory controversy, Locke (1976) criticized the suggestion that motivation and hygiene factors operate in a single direction. His argument was that there is a corresponding link between motivation and hygiene theory in contrast to Herzberg's opinion. Mottaz in 1985 argued and disproved Herzberg's concept that hygiene factors is not a source of job satisfaction, this followed his research work that suggested that external (extrinsic)

factors such as pay, rewards or promotion were established to be strong determinants of job satisfaction in lower level jobs. While, both hygiene and motivation factors are powerful determining factors for job satisfaction for all work cadre both private and public organizations. In addition, Wiley (1997 as cited in Giese & Avoseh, 2018) comments on the theory presumed inability to consider differences in people. Contrary to the model assumption that it is applicable to all individual in terms of occupation, age and gender, the study revealed that motivational preferences differ among individuals by demography, gender and profession.

On the other hand, supporters of Herzberg's model affirmed that combining the intrinsic and extrinsic factors were recognized as effective element for staff motivation but financial incentive were noted to be the strongest determinant for increased performance both in health sector and financial institution (Agbenyegah, 2019; Nuwatuhaire & Janan, 2021). Notwithstanding, the critics on Herzberg's model, it has been and is still the most widely accepted model for motivation theory.

Donabedian Model of Quality Care: Increased healthcare competition, public awareness, availability of different healthcare providers, greater patient demand for quality care and preferences has significantly changed how care is provided. Therefore, an important questions requiring considerate answers has been raised on cost effectiveness of care, availability of the skilled workforce and other useful resources, how care is delivered and the patient health status. All these issues centers on quality of healthcare services which is conceptualized on three dimensions namely "Structure, Process and Outcome" (LoPorto, 2020, p. 42). Quality of service is a key element to improving customer satisfaction and satisfied client often remain loyal to the organization thereby, helps to increase the revenue. Several attempts have been made to define or to evaluate quality, but the subjective nature of quality made it challenging due to different

perceptions and expectations of individuals to quality (Ramya et al, 2019). A review of literature denote that service quality is an intangible and immeasurable deliverable but the nature and manner in which it is rendered could lead to patient satisfaction or dissatisfaction (Abdelhamied, 2019). Satisfied patients are the key to organization success and profitability. Hence, there is need to generate significant information on different dimensions of service quality that will enable organization to identify potential improvement areas to focus on.

Endeshaw (2021) demonstrated that Ovretveit in 1992 proposed three components of quality of healthcare stated client quality, management quality and professional quality. Client quality assessed the end user's perception of the service rendered, whether the service meet, exceed or fall short of their expectation. The management quality ensured delivery of services in a resourceful and efficient method. Professional quality considered the skills of the workforce and whether the right processes and policies are adopted to meet the clients' needs. Similarly, Safi & Alagha (2020) stated that Lehtinen & Lehtinen in 1982, considered service quality in three dimensions namely: physical, interactive and institutional quality. Physical quality as the tangible aspect of service such as equipment and building. Interactive quality is the interaction between the client and the workforce during service delivery. Institutional quality is the perception of the existing and potential clients regarding the organization reputation and image. According to Alauddin et al. (2020), Parasuraman and other scholars in 1990 developed five dimensions of quality namely tangibles, responsiveness, assurance, reliability and empathy. Tangibles consists of the physical structure, the workforce and the equipment. Responsiveness is the promptness of service delivery and the willingness to assist clients. Reliability is the capacity to execute the expected service correctly and in a dependable manner. Assurance encompasses the skill, knowledge and politeness in carrying out the task with the ability to convey confidence and

trustworthiness while empathy denotes the delivery of individualized or person-centered care (Alauddin et al., 2020).

In addition, Safi and Alagha (2020) stipulated that Gronroos in 1984 introduced three dimensions of service quality namely: technical, functional and image. Technical quality denotes the service delivered and the outcome of the service whereas functional quality consists of the process involved in the service delivery. The model main principle is based on the client's perception in terms of expected and the actual service received. These dimensions are congruent with the views of Nordic model, which proposed that technical and functional quality are essential for delivery of effective quality services (Safi & Alagha, 2020). On the other hand, American school suggested five dimensions of service quality in line with Parasuraman's quality attributes namely: tangibility, assurance, reliability, responsiveness and empathy. The Institute of Medicine (IOM, 2001) framework assessed quality healthcare in six categories, effectiveness, and safety, people-centeredness, timeliness, equitable and efficient (Aggarwal et al., 2019) and this is similar to World Health Organization (WHO, 2007) framework consisting of seven domains namely: safe, efficiency, equitable, timely, effectiveness, person- centered and integrated.

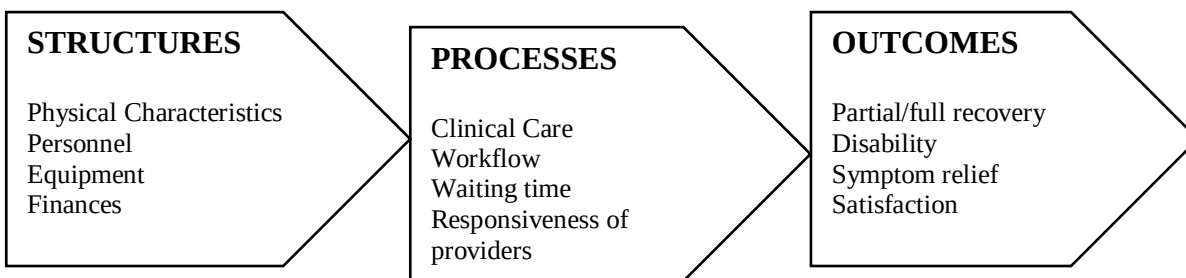
However, this study adopted Donabedian (1988) quality of care model which highlighted three dimensions of quality care services specifically: structure, process and outcome (LoPorto, 2020). Donabedian defined quality in terms of the following characteristics namely: equitable, efficient, acceptable optimum, effective and legitimate (Ameh et al., 2017). These defining attributes are positioned in the three dimensions of care structure, process and outcome with each component reliant on another. Equitable distribution means to be just and fair to all individual in the provision of care irrespective of gender, ethnicity, and location, economic or social background. Efficient care entails providing the best or optimal care services at a minimum cost.

Acceptable care service denotes provision of care in a way that will meet or exceed patient/families expectation as well as maintaining good patient –health provider relationship. Optimum care service is to ensure and maintain a balance between the advantages of healthcare services and the monetary value of care provided. Effective care involves providing evidence-based care that will be beneficial to individual and the society in a timely manner. Legitimate care encompasses providing the right care to the right individual by the right professional at the right time to ensure high quality care.

Donabedian model identified structure as the healthcare delivery environment and the needed resources such as equipment, patients, human and financial resources. While the process consists of the practices and procedures applied to provide care, which is the transactions between the patient and the service providers. Finally, the outcomes are the aftermath of the service, perceived as patient satisfaction and positive health status (Opele & Adepoju, 2024).

Figure 2.1

Donabedian Quality of Care Model



Structures

The first element in Donabedian quality of care “Structure” is recognized as the healthcare settings and it consists of three resources namely: the material resources, human resources and intellectual resources. The material aspect includes the appearance of the hospital building,

medications, equipment, hospital location, cleanliness, accommodation and finances, the human resources are the clinical and non- clinical staff while, the intellectual resources are the information systems and medical knowledge necessary for care delivery (Ameh et al., 2017; LoPorto, 2020; Panteli et al., 2019). Structure examples includes actions such as neatness of the staff uniforms, employee training which promotes the knowledge base of competent workforces, appropriateness of the care facility and effective information system. Well- organized structure has an optimal influence on process of care delivery as they are related to each other. However, LoPorto (2020) suggested that there are four themes recognized to impede or inhibit effective functioning of an organizational structure and they are:

- (a). Lack of relevant trainings that will clarify each individual role, responsibilities, expectations and set goals.
- (b). Personal interpretations occur following lack of clarity hence, every staff interprets expected core based on personal view leading to different interpretations and implementations.
- (c). Inability to provide the workforce with clear policies to guide their practices
- (d). Ineffective communication mostly between the management and the staff members which could be a major barrier to achieving organization goals.

Processes

“Process” is the second component and it includes the actual care service delivery, which involves utilization of all the resources, and the manner in which care is provided. Processes in this context comprises of the workflow and all activities involved in patient care from the point of first contact in the health facility to the final exit in order to achieve positive health outcome. It could be viewed in two dimensions namely; patient-related process and organization related process. Patient–related includes rate of intervention, prescription patterns, patient referrals, the

degree of patient -centered care etc. Organization- related comprises of compensation for health workers, drugs supply, and management of waiting lists, patient waiting time, and responsiveness of care personnel, friendliness, professionalism and communication (Panteli et al., 2019). Process is an intermediary between the structure and outcome of care and are contingent on a structure for acquisition of the needed resources for implementation of care services which results to health outcomes

Outcomes

The final element is “Outcome” and it is the aftermath or result of care hence, comprises of patient health promotion, improvement in health, coping ability, diseases or illness prevention, full recovery, improved knowledge, disability, mortality, patient and family satisfaction of care received. Outcome is associated with patient/families health experiences, satisfaction or dissatisfaction, patient health status, positive health outcome as well as reward for high performances for staff. According to (Ameh et al., 2017) Donabedian classified outcomes in two categories namely: technical and interpersonal outcome. Technical outcome incorporates the functional aspect of care service and could be viewed as decline of disease condition, functional ability, improved knowledge, and disability, lack of complication and/ or death.

Interpersonal outcome consists of the impact of care on the patient’s quality of life from the patient viewpoint. Patient and /or families most often have an expectation regarding the service they are going to utilize. Therefore, patient measures the perceived service quality outcome based on the prior expectation and their perception of the actual service provided.

Donabedian’s framework has been the fundamental benchmark paradigm for assessing the quality of health care. The model established that the three domains work hand in hand as structure is a precondition to effective process, and the processes are a precondition for high quality

outcome. Hence, it is vital to examine these three domains and identify if the interrelation exists in similar or contrasting angle or if there is no relationship at all. It is worthy to note that any form of defect in the SPO trio chain could potentially cause a break in continuity of quality care service because each triad play a significant role in entire quality health delivery. To exemplify this, the structural aspects might be appearing positive but processes and outcomes could be questionable and this will undoubtedly affect the threesome correlation effect. Thus, it is essential that structure and processes of care be reasonably adjusted to minimize or eliminate potential adverse events that might negatively impact on the outcome of care. Therefore, efficient and effective implementation of these quality measures in healthcare will help organizations to determine their success. Nevertheless, opponents of the framework argued it is too linear to identify complicated interactions among Structure- Process -Outcome constructs. They claimed that the model failed to include features of the patients, which are significant antecedents in healthcare quality assessment (Ameh et al., 2017).

Synthesis of Herzberg Two- Factor Theory of Motivation and Donabedian Model of Quality Care and Implication for the study

The synthesis of Herzberg two- factor theory of motivation and Donabedian's model of quality care provided a comprehensive knowledge of the factors that promote quality healthcare and health workers' motivation, commitment, loyalty and retention. The framework for quality of care by Donabedian referred to as Structure –Process -Outcome (SPO) was adopted and blended with HRM practices themes. The provision of quality service depends on human resource (workforces) who are the major facilitators for its accomplishment. The health personnel need to exhibit positive work behavior and proficiency in the delivery of quality care services, and these can be impacted through efficient human resource management practices. A study by Bilan et al.

(2020) demonstrated that company's success and quality attainment depends largely on the management of the workforce, proper implementation of HRM practices and the organization policies. Ali et al. (2023) attested that practice like recruitment can positively or negatively influence the company's performance and quality of service. This is based on the ability of the institution to hire talented and knowledgeable workforce with a zeal and motivation to accomplish success.

Similarly, there is a link between training and development and the overall health outcome. A study from Anwar and Abdullah (2021) revealed that staff who are abreast in training and development have better work life balance; they are knowledgeable and are high performers. Congruently, the variables in Donabedian model such as structure and processes that are associated with competence and responsiveness of care providers to quality service delivery based on their knowledge and motivation level are in conformity with Herzberg's motivators and hygiene factors, which are the agents of motivation for the workforces.

Correspondingly, the link between HRM practices and quality healthcare are revealed through incorporation of the patient's needs into the structure and processes for a profitable outcome (Ameh et al., 2017). These include activities such as the technological and human resource deployment and ensuring they are attuned with the daily care process and each patient's demand/ care need. According to Ameh et al. (2017) structure could be viewed in areas of building, inner setting (culture and leadership), staff skills and attitude related to motivation (Herzberg theory), patient characteristics, technology (functionality and accessibility), interaction with electronic medical record and outer setting consisting of finance, legislation and stakeholders involvement. While, processes are the care actions such as the workflow, patient centered care, shifting, process management (quality improvement and mistake proofing). Outcome involves the

health status of the patient, experience (satisfaction or dissatisfaction), the workforce experiences, efficiency (revenues and operation). These depicts Donabedian quality of care model and failure to integrate structure and process effectively will affect health outcome negatively. However, the ability to realize the expected outcome often correlate with the health worker's level of satisfaction or dissatisfaction (Herzberg's theory) as well as the zeal and the drive to deliver quality care and be a high performer.

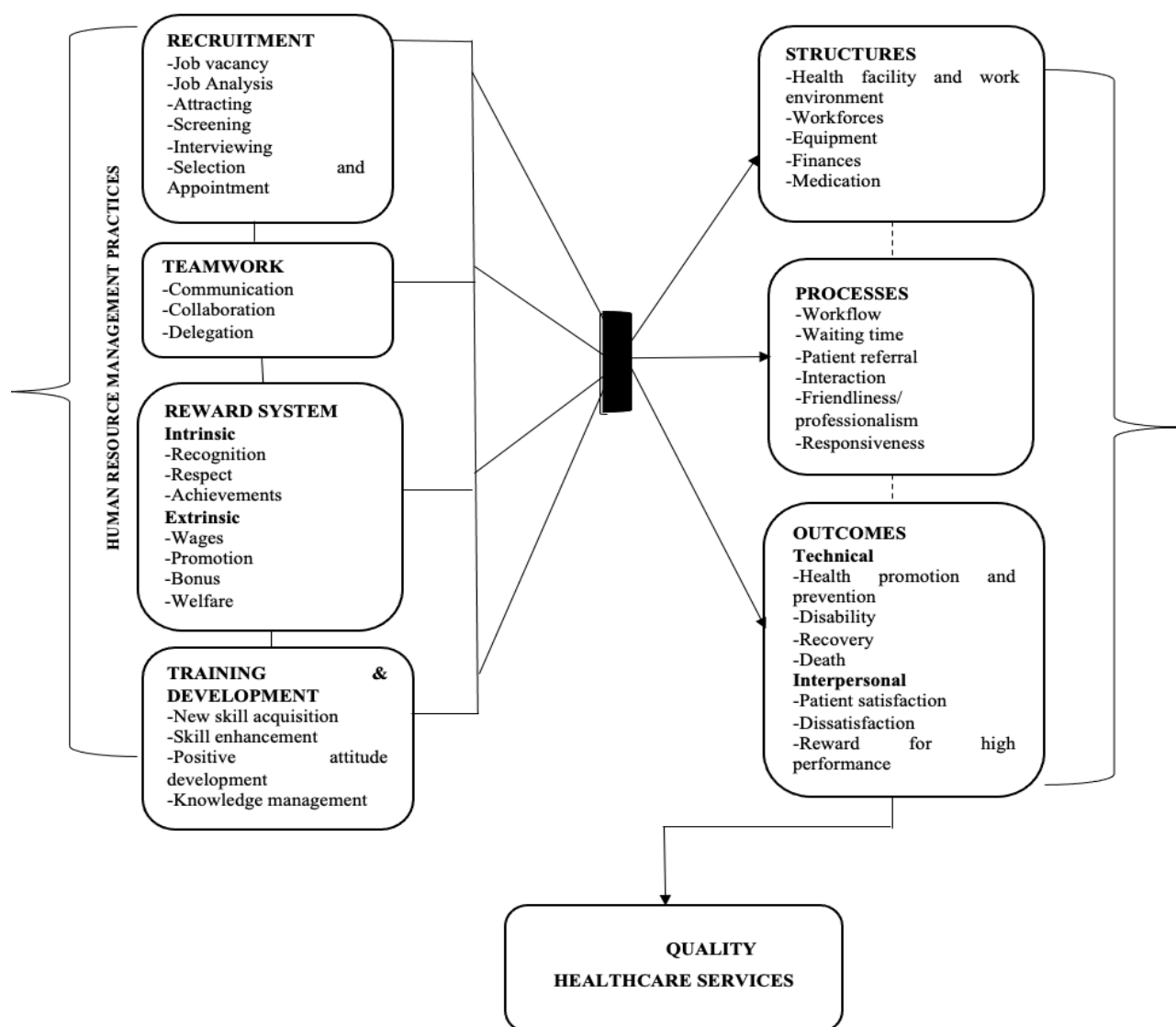
Furthermore, a systems approach to healthcare services assumes that the health system consists of correlated subsystems and components that carry out specialized functions. If there is a defect or inadequacy in the performance of any of the subsystems, the entire system performance will be affected. This implies that a highly complex system like medical care needs to be fragmented into subsystems to enable better analyses and understanding of each component. It is vital that each subsystem attains high performance then, jointly all components will merge to optimize the organization performance, quality services and profitability. Therefore, Donabedian's model, which consist of three components namely, structure, process and outcome (SPO) became very crucial and used as a taxonomy for assessing quality care (LoPorto, 2020). The SPO trio identifies various underlying factors that could help to assess a quality care service delivery but may not be sufficient for understanding the healthcare professionals work behaviours and what demotivates or motivates them to provide quality services (Ameh et al., 2017). To this end, Herzberg's two- factor theory becomes crucial to provide a deeper insight into the factors that influence staff work attitude and behaviour using HRM practices as sub- constructs that needs to motivate and align employees' goals to organizational goals in order to drive quality and success. Herzberg theory provides a generic underpinning that will enhance understanding of what influences health workers and the elements that motivates them to work hard, be satisfied as well

as provide high quality care and this synchronizes with Donabedian triad SPO framework, which expounds the healthcare supply chain. Donabedian's model of healthcare (framework) contributed to the understanding of how health services (inputs) are delivered in the care environment (Structure) by motivated and talented care providers (Herzberg theory) through the process cycle and finally transformed to (output) which generates outcome (LoPorto, 2020).

Additionally, Troth and Guest (2020) stipulated that attainment and sustenance of quality care depends largely on the health human resources who has been recognized as the key drivers to quality care. Donabedian quality of care model with focus on the three dimensions namely: structure, processes and outcome suggested that quality achievement is linked to the interconnectedness among the three attributes of the model. Inadequacy in any part of the framework such as structure that includes the health workers' could have a negative impact on the processes. Low morale, lack of job satisfaction or knowledge deficit could possibly have a detrimental effect on the care services rendered. Whereas, a knowledgeable, skilled and well-motivated staff is likely to provide care in an efficient manner in order to produce the desired outcome. Donabedian theory suggested that there should be consistency among the dimensions in order to achieve the set goals. In agreement with Herzberg's theory providing a conducive work environment as well as ensuring the workers psychological and physical well-being are considered and balanced to provide optimal care is essential. Therefore, it can be proposed that satisfied workforces in a good work setting possessing adequate competencies and good behaviours have the tendency to provide quality care services in an efficient and effective manner that will exceed patients' expectation leading to positive health outcome and exceptional patient experiences.

The theories provide implications to practice that can act as a guide for different disciplines in healthcare. The identified attributes can be used for measuring performances in various

healthcare settings including clinical, finance, administration, performance improvement and development of policies. This could potentially enhance understanding of the necessary actions required to improve the provision of quality healthcare.

Figure 2.2*Conceptual Framework*

Explanation of Conceptual Framework

The conceptual framework in figure 2.2 portrayed that healthcare quality services follow a sequential order and the effectiveness of each unit determines the other. There are physical, organizational and human related factors that play significant role in achieving quality healthcare services. The interplay between the human resource management practices and the other resources and skills in conjunction with good work environment will create a conducive atmosphere and motivation required for increased performance and quality care services. Included in the framework are human resource management practices such as recruitment, teamwork, reward system, training and development and they are part of the hospital management expectations to support the workforce for quality care service, high performance and profitability. Therefore, the study examines human resource management practices provided by the hospitals for the workers, (motivation in form of good reward system, well- resourced and conducive work environment and opportunities for career growth and development) that can positively affect the psychological wellbeing of the healthcare workforces.

When the health workers perceive management commitment to them through human resource management practice (training and development). They can view it as a form of transaction by which the employees because of the benefits received, feel satisfied and obliged to reciprocate through increased performances. Most often willing to go extra mile to achieve the set goals and ensure provision of quality care services to patients. However, despite having the human resource management practices in place, these practices alone cannot achieve effectiveness and quality but, should work in relationship with structure and process (quality of care model) in order to produce positive health outcome. For instance, when there is adequate time (structure) to carry

out quality improvement work, support and collaboration among colleagues (process) are essential to achieve a high level of improvement (outcome).

However, it is worthy to note that when the structure is efficient but there is a break or inefficiency in the process, it will result to a negative outcome therefore, to ensure effectiveness there must be a positive synergy among the three elements of quality care model. The link between structural attributes and processes of care and outcome may be disrupted in certain situation such as heavy workload with a high patient –to – doctor or nurse ratios. Heavy workload or low staffing level may result to incomplete task or decrease the time professional spent to interact, communicate and collaborate with patient and other multidisciplinary team thus, negatively affect quality of care services provided. Hence, the need for adequate staffing and better skill mix will help to reduce high staff turnover, absenteeism, burnouts thereby, leading to better quality care with positive health outcome and higher performance. To exemplify further, a well- motivated professional (structure) requires adequate communication and interaction (process) amongst team and with the patient during service delivery in order to provide quality care that will enhance patient health status (outcome). Specifically, satisfied, motivated and well- supported workforce in a good work environment remains loyal and committed to the hospital, increase performance and consistently attempt to delivery high quality care services for patient well- being and the organization success.

It could be assumed that HRM practices might impact structure positively without having a positive influence on the process of care or positively impact the process of care without similar effect on the structure. Therefore, examining the positive correlation between HRM practices and the structure- process- outcome of quality of care forms the fundamental basis for this study. Second, is to obtain an in- depth knowledge of the human resource management practices (reward

system, recruitment, teamwork, training and development) that positively influence quality care, the level of significance and the one with highest determining factor. The knowledge obtained will form the basis for measuring quality of care thereby will help to develop several quality assurance and improvement strategies.

Summary

This section provides a broad overview of the research literature review. The aim was to understand various facet posed by the studies on human resource management practices and its impact on quality healthcare. However, a brief summary of Nigerian healthcare system, structure and the current state of the country's healthcare was provided to elicit understanding of the origin and the need for the study. Several scholars stressed on the deplorable state of healthcare in the country with unending mass exodus of health workers to the western countries leading to acute shortage of health professional thereby worsening the deteriorated health system (Adejoro, 2023; Ubochi et al., 2019). Previous studies conducted on the field of study was explored and two main topics namely: human resource management practices (HRMPs) and quality healthcare (QHC) were discussed. This was followed by explanation of the sub- constructs of HRMPs and QHC with an empirical review of prior scholarly articles. This is significant because many studies have been conducted on quality of care from different perspective using different approaches with an aim to evaluate and offer different thought that will advance the subject of study. Some of the research studies analyzed quality healthcare problem from the angle of patient perceptions, leadership and government. However, this research intends to address the concern from the position of health human resource due to limited study on the intended study topic (Endeshaw, 2021).

Therefore, this section discussed the relationship between the two study variables with focus on the theoretical underpinning based on Herzberg's two- factor theory of motivation and

Donabedian quality of care model. Assessment and discussion on the synthesis of the two theoretical framework with the topic of research was conducted. Finally, the conceptual framework was developed and explained to provide a deeper insight on the influence of HRMPs on QHC.

CHAPTER THREE: RESEARCH METHOD

Introduction

This study investigates the impact of human resource management practices (HRMPs) on quality healthcare in Nigeria. In recent years, the country's health system is confronted with several challenges, including shortage of professionals, poor retention, and low motivation. Lawal and Criroma (2020) stated that demotivation between the workforce and shortage of healthcare personnel are among the major contributors to Nigeria's poor quality healthcare. These issues have considerably affected the quality of care provided to the populace. Therefore, HRMPs such as reward system, recruitment, teamwork, training and development recognized as essential tools are required for quality reformation. A study by Hamadamin and Atan, (2019) advocated that achievement of quality care rely predominantly on the health human resource who are the key divers of quality service. Thus, understanding the effect of HRMPs on health outcomes is crucial for improving quality care and system performance through effective strategy development.

To ensure effective systematic investigation of the relationships between HRMPs and quality healthcare, the study adopts a quantitative research design. The choice of the approach was based on its ability to gather and analyze statistical data from a wide sample of health professionals and the findings reliability and validity are increased when studies are replicated. This research design supports trends identification, variables measurements, test hypotheses about the nature and strength of the relationships and make predictions (Munther et al., 2024). The justification for this design is constructed on its objective ability that ensure findings do not rely on subjective evidence but on objective measurable data. In addition, the large sample size used allows for generalization of findings, which can inform policy and hospital management. However, quantitative design has certain challenges. One of the main hitches is survey fatigue and response bias among healthcare

professionals, who often work under time pressure and may not prioritize survey participation or may provide desirable social answers. In addition, this design tends to ignore the contextual details thereby losing depth and meaningful insights, which could enhance the richness of the findings (Lim, 2024).

Despite the limitations, quantitative research provides a strong framework for evaluating the studied variables. It supports relationships and test of theoretical models that link HRMPs inputs to quality healthcare outputs. Hence, the study contributes to the knowledge base required to strengthen HRMPs in Nigeria's health institutions, improve quality of healthcare and inform policy.

Overall, this chapter presented the strategies and practices used to select, gather and analyze the data collected. The scope encompassed the area of study, research approach and design, population and sample of the study, materials and instrumentation of research tools, operational definition of variables, study procedures and ethical assurances, data collection and analysis. The choice of methodological approach and design was determined by the research questions generated. With the aim to use, the best possible strategy that will provide answers and yield findings that would add to the existing knowledge for the healthcare stakeholders in order to enhance the quality of care.

Purpose of the study: The goal was to investigate on means of improving quality of care by adopting human resource management practices. This was prompted by the continuous outcry of the populace for quality care, health worker's shortages, industrial strike actions and the unending exodus of health professionals to other nations. Studies has shown that attainment of health quality predominately lies on the competencies, experiences, motivation and knowledge of the workforces (Alrawahi et al., 2020; Anwar & Abdullah, 2021; Kalogiannidis, 2021). Consequently,

understanding the recognized HRMPs at the tertiary government hospital will facilitate better implementation as it will serve as a guide to strategize and inspire professionals. Additionally, the knowledge will assist all concerned health stakeholders in developing an effective framework on area of staff welfare, job satisfaction, better work environment, skill enhancement, motivation and retention for improved performance and quality healthcare.

Study Area and the Health Institution: The study was carried out among the health workforces of tertiary government health institution, Lagos State University Teaching Hospital (LASUTH). The choice was based on Lagos state being one of the most populous state in the country with highly diversified professionals. It is equally the center of excellence recognized to have advanced and modern healthcare facilities and equipment (Apanpa, 2023). Lagos state is acknowledged for provision of innovative and excellent healthcare services in Nigeria. In addition, the large population of Lagos with various ethnicities supports accessibility to hubs of healthcare professionals with different specialties and divergent viewpoints on the problem of study. Overall, the rich and diverse hospital environment allowed the researcher to generate information from different groups of individuals with an understanding of the study subject.

LASUTH was founded in 1955 as a cottage health facility by the western region prior to Nigerian independence when healthcare was under the leadership of regional government (LASUTH, 2018; Ogaji & Brisibe, 2015). The cottage health center located at Ikeja area of Lagos state provided health services for the populace in the western region and gradually was transformed into a full- sized secondary health facility referred to as the general hospital. In the year 2001 Ikeja general hospital was transformed to Lagos state university teaching hospital, due to increased demand for tertiary health institution required for the training of health professionals (LASUTH, 2018).

The hospital has a proven record of been one of the leading teaching hospitals in the delivery of quality care services, skillful health professionals and advanced equipment in Nigeria and West Africa region. In the year, 2015 LASUTH performs its first kidney transplant (Obinna & Olawale, 2015).

Research Approach and Design

The philosophical assumption adopted by the researcher determined the study approach, design and the findings hence, the significance of adopting a model that is reliable with the study area. Taherdoost (2022) suggested adopting an appropriate approach which could be quantitative, qualitative or mixed method based on the angle from which the researcher want to address the research problem. Hence, the research approach selected and considered suitable for this study is quantitative. Quantitative approach involve systematic and scientific method of generating numerical data often used to predict, describe and explain quantities and relationships from a defined sample (Indu & Vidhukumar, 2020; Rana et al., 2021). Therefore, this research attempting to answer the research question collected numerical data that could describe relationships between the variables under study and statistically analyze the data to make inferences about the results (Saunders et al, 2019).

This chosen method was underpinn by philosophical assumption “positivism” that underlines objectivity, rationality, statistical reliance and generalization (Alharahsheh & Pius, 2019). Thus, in accordance with objectivity paradigm, the researcher attempts to be objective, strives to possibly circumvent bias and approach the problem from a distance (Haradhan, 2020). Quantitative approach embraces deductive reasoning classified as “top bottom” which first test the hypotheses, examine a general interest then narrows it down to a conclusion. It enables better understanding of casual relationships (Haradhan, 2020) as well as use correlational analysis to test

relationships between measured variables. Ultimately, sets of hypotheses were developed at the beginning, data collected verified using pertinent selected method (quantitative) and the results evaluated to predict outcome.

Despite the strengths of quantitative research which (Xiong, 2022) characterized as ability to generalize findings, testing hypotheses, cause-effect relationship measurement, reduction of investigators bias, able to predict variables and elimination of confounding variables. Yet, certain drawbacks have been identified with the approach such as lack of depth in the study rather much focus on the breadth, no consideration to the context and high level of generalization. In addition, the approach can be expensive because of the large sample size. Study are conducted in an unnatural setting; the use of statistical method can be confusing and is referred to as a rigid approach.

Nevertheless, qualitative was not considered the best approach for the study as a result of its subjective nature which embraces interpretivism paradigm and the data collection and analysis might be influenced by the researcher due to its subjective nature (Saunders et al, 2019). Qualitative is exploratory, enables researcher's high involvement in the real situation, attempting to find answers to participant's views, experiences and belief as well as problems not solved by quantitative research. Additionally, qualitative approach adopts inductive reasoning referred to as a "bottom-top" approach because it starts with an observation, develops a pattern, generate hypothesis then draws conclusion. Therefore, contrary to quantitative it helps to generate new theories and hypotheses for future research. The data collection tool for this approach is field notes, conversations, interviews, recordings, photographs and memos. These instruments are not structured like quantitative approach data collection tool hence, are subject to possible researcher's bias (Ahmad et al, 2019).

Although, this approach is recognized to enable researchers gain in- depth knowledge of the study topic, through respondent's experiences and perceptions, considers the study contexts and is able to generate new theories (Ahmad et al, 2019). However, the purpose of this research is not to obtain respondents viewpoints rather to understand the correlation existing between two variables thus, qualitative approach is not suitable for the study. Correspondingly, qualitative approach has certain drawbacks due to the incapability to generalize the results, do not test hypotheses, consumes time and has high researcher's bias.

Similarly, mixed method approach that is combination of quantitative and qualitative method was not considered suitable for this study. According to Wasti et al. (2022), in practice mixed method employs the theoretical and philosophical frameworks of both approaches for collecting and analyzing data. As a result of its ability to exploit the strength of both approaches mixed method is considered highly valuable as the strength of one approach cover the shortcomings of the other.

However, for this study mixed method was not considered fit because the researcher was not evaluating the participant in-depth knowledge of the constructs rather relationships with the aim of generalization (Rana et al., 2021). As well as to describe the characteristics of phenomena and association between the dependent and independent variables with necessary information, which will enable proper understanding of the research using an elaborate data. This is in line with the main objective of this study, to determine the relationship between various HRM practices and quality service in Nigerian health facilities as well as make predictions.

Research Design: The study used descriptive, non-experimental design considered the most chosen in the field of social sciences. This was justified by the fact that descriptive is designed in a way that will help to examine the impact of human resource management practices on quality

healthcare services and answer the research questions generated from the topic. Saunders et al. (2019) indicated that descriptive design has the ability to investigate and describe existing phenomena and their characteristics scientifically, accurately and in an unbiased manner without making attempt to establish causal-effect relationships between the variables. Additionally, it does not permit the researcher's interference but describe variables in the natural way it happened. Furthermore, it can act as an antecedent to more rigorous research designs such as correlational or experimental studies. In order words, Novosel (2023) stipulated that the selected design play a vital role in contributing to the body of knowledge by creating a groundwork for future study.

Steps to conducting a descriptive research design: First, interpretation of the research problem, which is the issue of poor quality healthcare, services in Nigeria hospitals. The objective was to describe and understand how the selected human resource management practices namely: recruitment, reward system, teamwork, training and development influences the quality of care services (structure, processes and outcome).

Second, the target population were determined and they consist of healthcare professionals such as doctors, nurses, pharmacists, midwives, laboratory scientist, radiographers, and dieticians. Sampling was through Cochran 1977 formula used to determine the sample size as a result of the unknown population. Thus, sampling was chosen to select the required sample based on availability and the nature of the participants' work shift patterns. However, a large sample size was obtained to enhance drawing of meaningful deductions.

Third, the research instruments for data collection was modified to suit the research objectives with focus on human resource management practices and quality healthcare. Hence, questionnaires were structured to generate relevant information that will provide answers to the research questions. The importance of validity and reliability of the measurement instruments used

in data collection was taken into consideration (Surucu & Maslakci, 2020). Likert scales was used to accurately design the data tools ensuring the relevant variables were well encapsulated.

Fourth, the data collection methods were primarily questionnaires, which enables the researcher to collect quantitative data that can be analyzed using statistical techniques. In addition, ethical considerations were duly followed, ethical approval, and informed consent were obtained.

Fifthly, statistical package for social science (SPSS) with the use structural equation modelling (SEM) e.g. PLS- SEM was adopted for analysis.

Sixthly, interpretation of finding considers patterns, trends, or significant factors that emerge from the data, with consideration to implications for practice and decision-making. This was followed by conclusions, identification of strength and areas for improvement. Recommendations was provided for future research in addition to practical implications of the study.

Finally, a comprehensive report will be prepared and information disseminated to all relevant stakeholders and academic journal in order to contribute to the existing body of knowledge in the field of human resource management and healthcare.

Benefits and limitations of descriptive design: Descriptive research enables collection of wide-ranging data due to large sample size that facilitates lots of information. It allows conducting of research in informants' natural environment, which supports collection of honest and high quality data (Saunders et al, 2019). Data collection is quick and cheap because of large sample size and the use of questionnaires. The robust and large sample size of data collected in descriptive study enables easy decision- making based on the statistical analysis, as the sample is the representative of the population.

Application of descriptive research design in evaluating the impact of human resource management practices on quality healthcare enable researchers acquire better understandings of the relationships between human resource management practices and the quality of healthcare. This knowledge can inform policymaking and potentially lead to improvements in healthcare quality (Novosel, 2023).

Despite descriptive statistics, benefits and shortfalls lie on the limited information, which could possibly be due to the complexities of the dataset. Thus, the importance of enhancing statistics with data visualizations such as scatter plots or graphs in order to provide better and broad understanding of the data distribution.

In addition, the study could be susceptible to different bias such as sampling bias, response bias, missing data bias or researcher bias (Manjunatha, 2019). There could also be misinterpretation error when the researcher fails to clearly elucidate or interpret descriptive statistics. All these might influence the validity and reliability of research findings. Therefore, the researcher acknowledged potential bias and attempt to minimize errors by applying techniques such as imputations and data interpretation contextualized within the research questions. An elaborate discussion on mitigation process for the likely biases was provided later in this chapter.

Correlational research design (Non-experimental design): It is worthy to note that correlational design is useful and suitable for identification of relationships between variables as well as make future predictions (Mekonnen, 2020). In other words, it could be valuable in understanding the association between identified HRMPs variables that influences quality services. Correlational statistical analysis was adopted to analyze the relationship between the two studied variables and help to understand the strength, direction, and nature of the relationships (Mekonnen, 2020). For instance, adopting this design in exploring the impact of HRMPs in quality

healthcare provided valuable knowledge on the factors that influences staff behaviour, attitude, and motivation (Najam et al., 2020) and how they impact the quality of healthcare with focus on the structure, process and the outcome of care (Ameh et al., 2017). Recognizing this correlation increases understanding of the factors contributing to staff job satisfaction and high quality care delivery leading to better patient outcome and satisfaction. It also help to identify the direction and strength of relationships between covariant. As a change in one variable is likely to influence another either in a similar or different direction or there is no correlation at all (Mekonnen, 2020).

Having identified the relationships between two variables, regression analysis through predicting or forecasting determines how one variable affects the other. In other words, correlational concentrates on the strength and direction of the relationships among variables. While, regression analysis helps to understand how the changes in the independent variables prompts changes in the dependent variables (Ali &Younas, 2021). Hence, the steps involved in regression analysis begins with analysis of the strength and direction of the variables, followed by determining the type of regression, in this study it is simple linear or multiple linear regression. The final step is to evaluate the validity of the model, which could be graphic or numeric.

On the strengths, (Mekonnen, 2020) stipulated that correlational research is a straightforward, relatively quick and economical research design. It enables study of series of variables and relationships with a tendency for high external validity. However, inability to infer causation to the recognized correlated variables and a tendency for low internal validity are the limitations.

Therefore, further studies using designs such as experimental or quasi-experimental is required in order to establish causal relationships as well as determine the effectiveness of interventions in human resource management and healthcare contexts.

Experimental research design: Experimental design is the approach that enables a researcher to carry out an investigation and measures the outcomes using exploratory approaches such as pre-experimental, true experimental, and quasi-experimental (Joao, 2022). Experimental design is an approach used to establish cause and effect relationship in a research. The aim of experimental or quasi experimental designs as indicated by (Zubair, 2023) is to determine the presence of underlying relationship between independent and dependent variables through systematic manipulations, observations and measurements. Andrade (2021) described independent variable as the variable that influence others while, the dependent variable is the variable being influenced. However, experimental design has been recognized to provide valid, optimal and information-rich result but it could be time consuming and expensive (Zubair, 2023).

Overall, for this study descriptive design was applied to explore and describe the four selected human resource management practices namely recruitment, reward policy, teamwork, training and development and how they influence quality healthcare services. While, correlational statistical analysis was employed to determine the relationship between the studied variables. Regression analysis enabled description, estimation and prediction of the independent and dependent variables (Ali & Younas, 2021). On the other hand, experimental or quasi experimental were not considered as suitable design for this particular study because the study is not attempting to establish causal relationship between variables.

Population and Sample of the Research Study

The Nigerian health system is still confronted with the several challenges ranging from poor quality healthcare, shortage of skilled health personnel, and medical tourism leading to continuous outcry from the populace for a better healthcare system. Like most developing countries in Africa, the poor working condition, inadequate modern infrastructure, bad economy

among other factors, result to continuous migration of talented workforces to developed countries for a better working condition and quality life. The outcome is that the remaining professionals in the country are often not adequate to provide good care to the large populace due to work overload, burnouts, lack of motivation leading to delivery of poor quality services. Therefore, there is need to study some human resource management practices (HRMPs) and evaluate their impact on quality healthcare in Nigeria context. This current study will be beneficial to inform policy and other stakeholders on the indispensable role of Nigerian health workers and the changes required to enhance their working conditions in order to improve healthcare quality in the country.

As a result of insufficient study on evaluation of quality healthcare in Nigeria from the angle of the health human resource, this study intends to address the identified gaps. The study was conducted on the hospital environment with high multicultural workforce and large population. This was considered necessary because Lagos state has been recognized as the center of excellence in Nigeria with modernized healthcare system. The target population for this study are exclusively healthcare professionals such as doctors, nurses, pharmacists, laboratory scientists, dieticians, physical therapists, radiographers and midwives. The target population consists of those clinical staff the researcher assumed have the ability to provide the right answer to the research questions in order to meet the research objectives.

The target population was estimated at about 4,000 healthcare personnel (Husmansodiq, 2023), comprising of doctors, nurses, midwives, pharmacists, laboratory scientists, physiotherapists, dieticians, and radiographers. Supporting this estimation, Bello et al. (2021) examined 440 healthcare workers drawn from a population that included 559 doctors, 954 nurses, 129 pharmacists, and 146 laboratory scientists. Furthermore, Fabamwo (2025) stated that LASUTH currently have about 740 doctors and nearly 1,000 nurses, reinforcing the substantial

size and diversity of the healthcare workforce within the institution. These figures reflect the breadth, justify the approximation of 4,000 professionals of LASUTH's healthcare workforce, for determining the target population.

Sample of the Study: A probability random sampling technique was adopted to select respondents from the target population. Participants were selected from Lagos state university teaching hospital based on availability, accessibility and ability to provide answers to the research questions (Obilor, 2023). A large sample size of the healthcare workers' population willing to participate in this quantitative study increases the sample statistical power (Golzar et al, 2022; Kang, 2021). Therefore, power analysis was carried out in order to determine the best sample size that will make the study statistically significant. According to Kemal (2020), power analysis is used to determine the number of sample to support obtaining of result that is significant. Determining the statistical power analysis of the study relies on the appropriateness of the sample size that can lead to reliable and reproducible results. Although, Cochran formula is often employed to determine the sample size when the population is quite large, but it is not suitable for the current study (Shete et al., 2020).

Therefore, G*Power software was adopted (Kang, 2021), with alpha level of 0.05, statistical power of 0.95, total numbers of predictors of 20, and a low effect size of 0.1. This effect size was adopted to enhance the sample size (Cohen, 2020). The estimated sample size was 324 participants, which agreed with the estimated sample size of 200-500 sample size needed for structural equation modelling in the literature (Ajayi & Adebayo, 2021; Memon, 2020).

Also, adopting Yamane's sample size formula (Oluigbo et al., 2024; Adam, 2020) for a known finite population, where the sample size, $n = N / (1 + Ne^2)$, and, 'N' is the population size (4000), and 'e' is the desired margin of error (5%), the sample size was determined as follows:

$$n = 4000 / (1 + (4000 \times 0.05^2)) = 364 \text{ participants.}$$

Consequently, 385 participants completed the survey, and this number will help to accommodate incomplete or unreturned questionnaires. This is crucial because although, recruiting very large number of participants is expensive yet, inadequate number of participants could lead to inconclusive statistics (Kang, 2021; Kemal, 2020). This number was backed up by literatures that suggest using a minimum of 150 participants or using 10 times the number of parameters estimation model. Some scholars postulated that structural equation modelling sample size should be about 200 – 500 participants (Ajayi & Adebayo, 2021; Memon, 2020). The researchers opined that use of small sample size could result to convergence failures, which might be in form of the software failure to reach a satisfactory solution, improper solutions associated with measured variables having negative error variance estimates or standard errors related to reduce accuracy of parameter estimates (Kang, 2021). Thus, the minimum number of participants required for SEM sample size are harmonized with the 324 generated by G*Power and 364 from Yamane's equation for the study.

Healthcare personnel from various listed units of the Lagos tertiary health institution such as Internal Medicine, Surgery, Ophthalmology, Pediatrics, Radiology, Dentistry, Midwifery, Pharmacy, Laboratory, Physiotherapy, Dietetics, Psychiatry, Ear, Nose and Throat (ENT), Nursing, Obstetrics and Gynecology were purposively selected for the study.

Table 3.1

Sample size for the study

Target participants	Total sample size	Selected Health Institution	Instruments
All Healthcare Professionals at the	385	Lagos State University	Questionnaire

selected departments in the study area		Teaching Hospital (LAUSTH)	
Total			385

In choosing informants or participants for the study, a non- probability convenience sampling technique was adopted. This involves the professionals (human resources) operating on various departments of the hospital whose activities are related to providing quality of care. As a result of 24 hours' hospital operation, most of the health personnel work on shift basis and this necessitates the use of random sampling that will enable the researcher to easily select respondents conveniently.

Therefore, questionnaires were distributed department by department with the help of willing unit heads or delegated staff, until the required number was attained. To circumvent double or several participations, a register was created with distinctive identification number for various departments and the workforces, itemizing each individual already captured as well as to ensure even distribution of questionnaires across the selected units of the hospital. This also help the researcher to collect the questionnaires with ease, already equipped with the list of units and the number of participants given the tool in various departments.

Inclusion and Exclusion Criteria: The inclusion criteria for participants incorporate healthcare professionals such as doctors, nurses, pharmacists, laboratory scientists, dieticians, physical therapists working at the selected facility and have spent about one year and above in the organization. The respondents are within the ages of 18 to 60 years. These participants include only those individuals with mental capacity and can provide informed consent themselves. While, Exclusion criteria entailed participants who are not medical professionals, not working in Lagos

state government tertiary health sector for one year and above. Individuals that are not mentally capable to make decision on his or her own and are unable to provide informed consent for themselves were not recruited. In addition, individuals above 60 years of age or have not worked in the organization for up to one year were excluded from the study.

Random Sampling: Random sampling is a probability sampling technique that creates possibility for each person in the target population of 4000 health workers to participate in the study (Bhardwaj, 2019). Thus, it is used to select participants that are available and willing to partake in this study within the hospital environment. Simple random sampling are employed to ensure members of the population are randomly selected to participate in the study (Bhardwaj, 2019; Noor et al., 2022)

Random sampling is a fair process and provides equal opportunity for every individual in the target population. Furthermore, it reduces the likelihood of selection bias thus more reliable and finding can be generalized. It expedites data collection process, is quick and cost effective. In addition, the uncomplicated nature of the technique makes it easy to meet quotas within a short timeframe (Obilor, 2023).

Nevertheless, its limitation requires the researcher to have an accurate number of the target population, which might be challenging to obtain in cases of mixed population. In addition, this sampling technique may be resource intensive due to large number of participants (Ahmed, 2024).

Florczak (2022) opined that the bias associated with sampling makes it difficult to make inferences about the entire population and the findings cannot be generalized. Hence, Obilor (2023) highlighted there is low external validity with sampling due to great likelihood of bias and insufficient power in differentiating the participants. However, Stratton (2021) postulated that certain steps could be taken to enhance sampling credibility such as: to ensure there is adequate

number of participants in the study, report the actual numbers and sustain at least 80% participation. Define the characteristics of the study participants and ensure the demographics matches the target population as demographics discrepancy denotes possible bias in the research. Diversify data collection to increase involvement, representativeness, and participation by collecting data at different times and dates as well as using online (emails) and physical models. Ensure that only validated questionnaire was used for data collection.

Conversely, the validity and reliability of the sampling technique are significant in evaluating research measurement tools. Surucu & Maslakci (2020) indicated that reliability and validity of a study could be determined by the quality of data collected and the sample size. Hence, validity involves the measurement instrument (what and how well it measures) while reliability concerns the trustworthiness of the data generated from the tools or instruments in terms ability of the tool to regulator random error.

Constructs Measurements: Measurement of construct is significant and should be conceptualized by the fundamental concept and the identified dimensions of the constructs (Clark & Watson, 2019). There is need to ensure the measurement indicators represents all the characteristics of the construct in a clear, and meaningful manner. For example, if the construct is "team work," the aspects of the variable that contribute to teamwork such as decision making, collaboration and communication should be clearly outlined. Hence, the need to assess the construct to determine the level of measurement or rating scale to be assigned.

The construct HRMPs was explored using Herzberg's two-factor motivation model and measurement involves the four selected sub-constructs namely: recruitment, teamwork, reward system, training and development. The table below further elaborated this.

Table 3. 2

Human Resource Management Practices (HRMPs) using Herzberg's two-factor theory of motivation

Herzberg's model	Recruitment	Teamwork	Reward system	Training and Development
Intrinsic	-Right skill- mix -Competent and skilled staff -Fairness	- Collaboration - Communication -Decision making	-Recognition -Appreciation -Career growth -Achievement -Promotion	-Constructive feedback. -Knowledge sharing
Extrinsic	-Good work environment. -Staff onboarding -Adequate staffing -Job description	-Support from colleagues -Reduced workload through joint effort	-Remuneration -Supervision -Association with management and colleagues -Fringe benefits	-In- service training -Workshops -Seminars -Financial assistance for higher education

Similarly, although, several scholars have developed various dimensions of quality, Gronoos (1984) developed two aspects of quality, Parasuraman & Berry developed five domains, IOM developed six elements, WHO established seven features of quality, and they are safety, effectiveness, efficiency, timely, person – centeredness, equitability and integrated. All the dimensions by different authors are interrelated but this study evaluated quality healthcare from the angle of World Health Organization quality dimensions and it was addressed using (Donabedian, 1988) quality of care model.

Table 3. 3

Quality healthcare measurement using Donabedian quality of care model on WHO quality dimensions

	WHO dimensions of quality	Structure	Process	Outcome
1	Safety	-Healthcare professionals' technical skills. -Facility settings, decor and cleanliness	-Appropriateness of care services delivered. -Staff training and development	Improved patient health outcome.
2	Effectiveness	-Adequate staffing level -Availability of medications	-Competency of the providers. -Good interpersonal relationship with patient -Trust in care providers	-Friendly and knowledgeable staff -Reduced work overload and burnouts -Reduced staff turnover
3	Efficiency	Available and functional equipment	-Responsiveness of staff to patient. -Right skill- mix. -Listening to patients.	-Reduced mortality -Patient follow –up appointment
4	Timely	Accessibility	Waiting time	-Efficiency of care organization is enhanced.
5	Person-centered		-Courtesy and emotional support. -Respect for patient preference and privacy. -Patient involvement in care decisions	-Patient – satisfaction -Staff job -satisfaction
6	Equitability	-Affordability -Availability		-Healthier community -Reduced morbidity

7	Integrated	Variety of clinical services	-Open communication and information flow among staff. -Effective communication between professionals and patients.	Easier access to care (care service in one location)

Consequently, construct measurement for this study was facilitated by a review of existing literature, which, revealed previous measurement scales, or tools and enable understanding of how to adopt and redesign the instruments to suit the current study (Clark & Watson, 2019). The extent to which the measurement is free from error or bias help to determine the reliability of the data collected. Hence, Likert scale was employed to ensure internal consistency of the items on the research instrument. The constructs measured are human resource management practices with four sub-constructs (recruitment, reward system, teamwork, training and development) and quality healthcare with three sub- constructs (structure, process and outcome) as indicated in the above table.

In measuring the construct HRMPs, and quality of care, questionnaire was drawn using 5 point Likert scale with 28 items centered on reward system, recruitment, teamwork, training and development as well as 35 items on quality healthcare with the following values attached: Strongly agree to Strongly disagree, Highly important to Not important and High impact to No impact. Subsequently, the responses were used in correlational and regression model to examine the relationship between the selected HRMPs and quality healthcare.

Materials/Instrumentation of Research Tools

The research instrument used in this study was structured, close- ended questionnaire (see Appendix B) titled “Evaluation of the impact of Human Resource Management Practices on

Quality Healthcare in Nigeria”. Designing of the research tools used for collection of data relied on operationalization through definition of the study key concepts and hypotheses. However, for ease and clarity, concepts of the study in figure 3. 1. Illustrated – Human resources management practices as HRMPs and Quality Healthcare as QHC. Furthermore, HRMPs consists of four sub-constructs namely: Rewards System coded as HRMP- RW, Recruitment as HRMP- RC, and Teamwork as HRMP –TW and Training and Development as HRMP- T&D. On the other hand, Quality Healthcare (QHC) three sub-constructs are coded thus, Structure QHC -S, Process as QHC -P and Outcome as QHC -O. Thus, 16 hypotheses were generated from the framework. Based on the aim of the study, which was to examine the relationship between human resource management practices and quality healthcare, H1, H2, H3, and H4 were used to investigate the impact of each HRMPs construct on QHC (Najam et al., 2020). On the other hand, the remaining 12 hypotheses defined as a, b, c, examined the link between individual HRMP and each sub-construct of QHC.

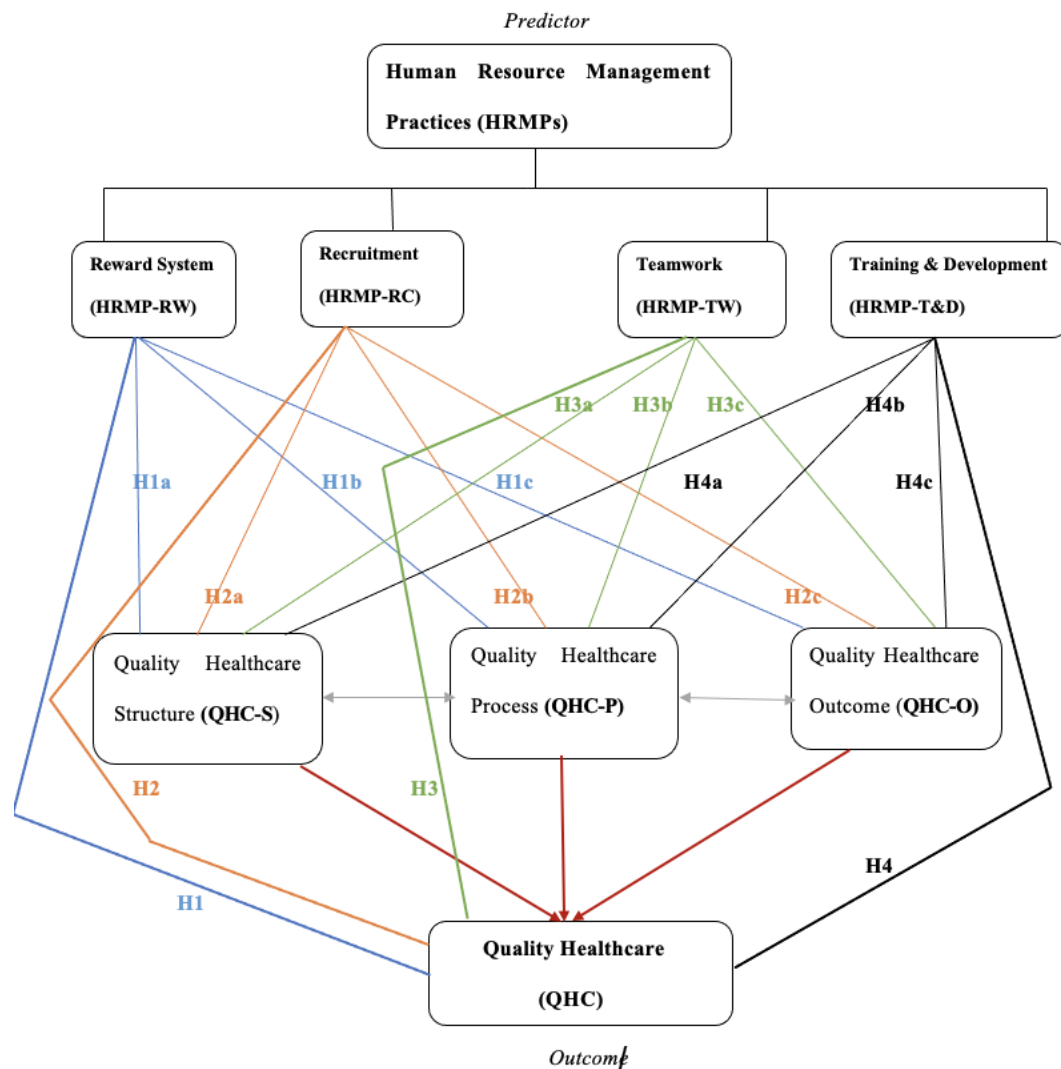
For example, *(H1) - There is a significant relationship between HRMP- RW and QHC*

(H1a)- There is a significant relationship between HRMP- RW AND QHC-S

(H1b). There is a significant relationship between HRMP- RW and QHC- P

(H1c) – There is a significant relationship between HRMP- RW and QHC- O

Figure 3.1
Hypothetical Framework



Questionnaire: Several copies of the questionnaire were administered to the participants across different selected departments in the hospital manually through one to one distribution. The variables designed on the questionnaire was adapted from previous related research and validated questionnaire. The questionnaire was divided into three sections outlined as a, b and c. The first section (A) focused on the sociodemographic characteristics of the informants. The second section (B) divided into four sub- sections explored the selected human resource management practices within the hospital. The third section (C) examined the quality of care with emphasis on the

structure, process and the outcome of care in the health institution. Two-hundred and ninety (290) questionnaires were administered to participants at the study area. Based on the fact that this study attempts to evaluate the relationship between two constructs: HRMPs and Quality healthcare, four major instruments were adapted from related articles.

This study adapted the research instrument from the article “relationship between perception of HR practices and employee outcomes scale”. The tool was from Boon et al. (2011) based on the previous work of Boselie et al, (2005) who developed the original instrument. Reliability and Validity evidence was provided through exploratory factor analysis followed by a second factor analysis, which revealed all seven HR factor scale. The HR factor scale was tested using confirmatory factor analysis in AMOS (Boon et al, 2011). This scale was only slightly modified to fit current hypotheses and the Nigerian context. Seeking for permission was not necessary, as the authors freely permitted article use for teaching, research and personal study.

Second research instrument was adapted from “Patient Satisfaction Questionnaire short form (PSQ -18)” originally developed by (Marshall & Hays, 1976) equally adapted from the work of (Thayaparan & Mahdi, 2013). This tool has been validated, internal consistency and reliability maintained and has been used by several healthcare settings. This tool covers the seven dimensions of quality care such as technical quality, interpersonal, general satisfaction, communication, financial, accessibility and convenience. The instrument has been marginally adjusted to fit the study context. This instrument could be adapted or adopted without permission from the authors as indicated on the disclaimer in the Appendix ii.

Third research instrument was adapted from “Patient Satisfaction with Healthcare Service Quality and Its Associated Factors at One Polyclinic in Hanoi, Vietnam” developed by the Vietnam Ministry of Health and adapted from (Thanh et al, 2022). The tool covers quality dimensions such

as the facility, interaction, accessibility, information transparency and service result. The instrument was slightly modified to fit the context of the study. The authors gave permission to adapt the tool, evidenced in Appendix ii

Fourth research instrument “PSNCQQ - Patient Satisfaction with Nursing Care Quality Questionnaire” (Laschinger et al., 2005) was adapted from “patient satisfaction with the quality of nursing care” (Karaca & Durna, 2019). A multidisciplinary research team at the Hospital Corporation of America originally developed the tool. For the current study, the tools were minimally modified and the authors gave permission to freely access the materials. Evidence shown in Appendix ii.

Reliability: Reliability describes the extent to which the results gained from the research tool can be consistent and possibly replicated or repeated (Florczak, 2022). Ability of the instrument to yield same result when constantly repeated increases the reliability of the measuring tool (Surucu & Maslakci, 2020) and Cronbach alpha coefficient is recognized as the most suitable measure for reliability particularly when Likert scale is used. Despite, the benefit of reliability it is not adequate but must be combined with the validity hence, a reliable instrument should also be valid. For this study, internal consistency reliability was conducted using Cronbach alpha coefficient. The questionnaire accepted an alpha coefficient of 0.95 suggesting that the items on the research tool are reliable and replicable.

Table 3.4

Reliability Measurement

Constructs/Variables	No of items	Cronbach’s Alpha
Reward System	5	0.677

Recruitment	5	0.741
Teamwork	5	0.668
Training & Development	5	0.698
Structure	7	0.736
Process	8	0.704
Outcome	4	0.616

Validity: Validity denotes being able to measure what it is meant to measure. To what extent did the instrument measure the areas of investigation under study (Surucu & Maslakci, 2020). There are several types of validity but for this study only the face, content and construct validity will be addressed:

Face validity entails the researcher subjective determination of whether the measures seems to be related to the variable. It examines the questionnaire from the angle of been viable, clear, readable, relevant and consistent. Although, critics of face validity argued that it should not be classified as validity because of its weakness or shortcomings.

Content validity outlines the generalizability of the instrument in terms of the extent to which it covers the entire study content. It is generally recommended in the development of new questionnaire to ensure inclusion of vital information and elimination of unwanted items. Content validity requires extensive review of literatures and review by experts in order to establish validation.

Construct validity: The concept of construct validation is significant in evaluating questionnaire designed to measure constructs that cannot be observed directly such as quality of healthcare. Lack of construct validity makes interpretation of results from the questionnaire difficult hence, inability to draw inferences from the responses.

Thus, this study questionnaire was subjected to face, content and construct validation process. Face validity was used to determine if the instrument appears to test what it is expected to measure. While, the content validity was used to examine the extent to which the items incorporate all the hypothetical components to be tested. The validation process involves given out the instrument to experts to review. The questionnaires were designed and constructed based on extensive reading of several literatures and books. Sixty- three (63) items on the instrument were inspired by different questionnaires used in other studies on human resource management, recruitment, reward system, teamwork, training and development and quality of care namely: structure, process and outcome. (Grobler et al., 2019; Hall-Lord & Ballangrud, 2022; Hareendrakumar et al., 2021; Karaca & Durna, 2019).

My supervisor and other experts revised the structure, format and content of the document. Content validation was conducted followed by a slight modification of the questionnaire resulting to the use of different Likert scale 5 points instead of the initial 3 points. For this study, evaluate the impact of HRM practices on quality healthcare, respondents were asked to indicate for each item, the degree of agreement or the effect of HRM practices on quality of care. A five-point Likert scale ranging from 1 to 5 was used on a wide range of practices such as recruitment, reward system, teamwork, training and development as well as in quality of care. Example of the instrument items includes “Adequate knowledge sharing among team improves quality services delivery”, “Performance related pay motivates” and Patient health information are

clearly and elaborately discussed with patient and/or families. Appropriate corrections were made and the instrument was further validated through pilot testing.

Pilot Testing

The measurement instrument was pilot tested with a small sample of about 50 respondents consisting of healthcare professionals in a different hospital with similar work environment in Lagos state but not part of the study sample. The aim is to identify any possible issues in the wordings, clarity or understanding of the items and the general reaction to the questionnaire.

Pilot testing allows for re-modification and enhancement of the items before use in the main study as well as to establish reliability and validity of the measurement instrument.

Reduction of Initial Measurement Variables: A pilot study comprising of 63 questions in a survey instrument were distributed to 50 participants, recruited through convenience non-probabilistic approach using cross-sectional time horizon. The reduction of measurement variables from 63 to 39 was achieved through a combination of exploratory factor analysis (EFA), principal component analysis (PCA), and Cronbach Alpha's reliability check, as detailed below:

Exploratory Factor Analysis (EFA) is a statistical technique used to identify underlying factors or dimensions within a set of observed variables (Zeynivandnezhad et al., 2019). It was employed to explore the relationships among the 63 variables and identify patterns of interdependence.

Principal Component Analysis (PCA) is a dimensionality reduction technique that aims to transform a large number of variables into a smaller set of uncorrelated variables referred to as the principal components. By applying PCA, the researcher was able to identify the most important components that captured the majority of the variation in the dataset.

Cronbach Alpha's reliability check is a measure of internal consistency reliability. It assesses how well the items within a set of variables correlate with each other. By conducting a reliability check using Cronbach Alpha, the researchers evaluated the reliability of the measurement variables and identified items that were not strongly correlated with others.

Reduction of variables: Through the combination of EFA, PCA, and Cronbach Alpha's reliability check, the initial set of 63 measurement variables was reduced to 39. This reduction was achieved by eliminating redundant or weakly correlated variables and retaining those that contributed most to the underlying factors or dimensions of interest.

As stated in the literature (Surucu & Maslakci, 2020), reliabilities below 0.60 are poor, 0.70 range is acceptable, and above 0.80 is good. Thus, the measures' internal consistency in this study is acceptable with intention to leave and good for other measures.

Operational Definition of Variables

This section gives operational definitions of various variables used in the context of the study. Operationalization is the process and technique that enables abstract concepts to be transformed, measured quantitatively and tested scientifically by operationally defining the variables (Aragon et al, 2022; Gonzáles, 2021). The two main constructs involved are human resource management practices (HRMPs- Independent variables) and quality healthcare (Dependent variables). The independent variable, HRMPs comprises of four sub-constructs namely reward system, recruitment, teamwork, training, and development while quality healthcare has three sub-constructs such as structure, process and outcome. HRMPs comprises of certain organizational schemes, guidelines and procedures that influences staff work performances, attitudes and behaviours towards goal attainment (Hamadamin & Atan, 2019). Each construct is operationally explained below:

Construct/variable 1 - Recruitment: Operationalizing recruitment in healthcare involves translating recruitment processes and goals into practical activities and measurable steps to facilitate attraction, selection and retention of skilled and experienced health workers.

Operationalization of recruitment entails: Outlining recruitment needs of the institution such as identification of the vacant positions and specific roles. As well as determining the necessary skills, experiences and qualifications applicable for respective role. Development of a recruitment plan that defines the policies, resources and timeframe for applicants' attraction and selection. The plan incorporates various channels for recruitment such as social media platforms, professional networks, recruitment agencies, relevant websites and online job boards. Sourcing for candidates' entails job advertisement via the channels identified with a clearly defined job description, responsibilities, position, qualifications and benefits (Chukwu & Onuoha, 2022). Standardized process for screening and selecting of candidates with a well- defined scoring system and evaluation criteria. It consists of resumes and application materials reviews, administering proficiency assessments or other specific test associated with the roles, carrying out online video or face-to- face interviews (Gaikwad & Vijendra, 2022). Conduct background checks and credential verification for selected candidates such as reference checks, certificates, licenses and criminal record to ascertain candidate's aptness and integrity. Once candidate suitability is determined, compensation package and other pertinent terms are discussed and negotiated upon. Followed by onboarding for smooth transition hence, induction and onboarding that will expedite integration into the health institution for effective job performance, engagement and retention (Murgoski, 2023).

The following literature are adopted to support operationalization of the variable - recruitment:

Studies revealed that timely recruitment of skilled and competent staff enables availability of right skill mix to close the gaps created by continuous shortage of healthcare staff as well as promote quality care services (Kushemererwa et al, 2020). This evidence guides item “iv and v” of the data collection tool.

Scholars proposed that institutional accomplishment and ability to compete is correlated to the performance of appropriately hired staff (Adeola & Adebisi, 2016; Barnicot et al, 2020). Hence, recruitment of talented workforce creates an enabling environment for greater productivity.

The impact of onboarding in undefined job description has been highlighted as an impediment to high performance and clear job description recommended as a strategy to improve recruitment and retention (Murgoski, 2023). These evidences guides item ‘i’ and ‘iii’.

Literatures in Nigeria and sub-Saharan Africa, acknowledged that poor efficiency services are connected to recruitment exercises that are not effective which often are associated to corrupt acts such as tribalism, nepotism, personal and political influence (Norskov et al, 2022; Nwafor & Odimegwu, 2023). This unprincipled recruitment approach results to excessive turnover of workers and poor quality services because appropriate and qualified individuals are not selected for the required job. Itemized on “vi”. Level of measurement was ordinal with Likert questionnaire to determine the participants’ perception on how recruitment impacts quality of care using the range of scores 1 – 5 with survey tools.

Construct/variable 2 – Reward system: Operationalizing healthcare reward system involves designing and implementing a well -designed approach for recognizing, rewarding, and motivating the workforce for their hard works, contributions and accomplishments. Steps involved in operationalizing a reward system are as follows: Clearly define reward system objectives such as improvement of employee satisfaction, enhancement of performance, retention and nurturing a

culture of recognition and commitment. Categorize different types of rewards such as financial incentives (salary raise or bonus), non-financial recompenses (recognition, appreciation, certificates, plaques) and career development opportunities (Uzochukwu et al., 2023). Outline key performance indicators and metrics that will be used in measuring and evaluating performance. These metrics should be objective, measurable, and directly related to the desired outcomes and organizational goals. Define clear and transparent eligibility criteria for different rewards. This criterion may be based on individual performance, patient satisfaction scores, quality improvement initiatives, clinical outcomes and/ or professional development achievements (Alrawahi et al., 2020). The need to develop a structured recognition program consisting of formal and informal means of acknowledgment. This may include having regular feedback sessions and organization recognition events.

Evidently, communicate the details of the reward system to all health staff and ensure adequate understanding of the purpose and benefits. Provide information on how rewards are earned, available rewards, the criteria for eligibility and the frequency of evaluations (Niguse & Getachew, 2019). Conduct regular performance evaluations based on the defined metrics and criteria. Provide guidance and constructive feedback to the workforce on their performance and improvement areas (Young & Smith, 2022). Ensure equity, transparency and consistency in the reward distribution process based on established criteria and performance evaluations. Continuous evaluation of the effectiveness of the reward system through the staff feedback and monitoring of key performance indicators. Review the system regularly and make necessary modifications in accordance with institutional goals.

Evidences that support reward system operationalization are defined thus: Reward system consists of appreciation, admiration, development opportunities, achievements and independence

to decide how to undertake a task and challenging job, responsibilities (Anku, 2018; Niguse & Getachew, 2019). Itemized on “iv”. Reward could be built around performance by carrying out appraisal for employees every year in accordance with the company policy (Touma, 2022). Itemized on ‘ii’. Liu and Liu (2022) proposed that monetary rewards have a significant and positive effect on staff performance particularly, in areas of organizational progress, staff motivation, satisfaction and quality service delivery. Itemized on ‘i’ and ‘iii’.

Level of measurement was ordinal with Likert questionnaire to ascertain the degree of importance of reward system using the range of scores 1 – 5 with survey tools: [5 = Very Important]; [4 = Important]; [3 = Moderately Important]; [2 = Less Important]; [1 = Not Important]. (i). The basic pay and benefit package I receive are satisfactory and an important factor driving my performance. (ii). Performance related pay is an important feature that motivates me to work harder as well as provide quality services. (iii). The monetary rewards is an important factor that gives me inner drive to meet or exceed patient quality service expectation. (iv). The non-monetary rewards such as recognition or praise is important factor that boost my inner drive to provide quality care services.

Construct/variable 3- Teamwork: Operationalization of teamwork in healthcare includes Implementation of strategies, structures, and processes that support dynamic collaboration between the workforces in order to improve patient outcomes.

Establish clear goals and results aimed to achieve. Teamwork should have a shared vision focusing on effective communication, collaboration and patient-centered care. Clearly outline each team member roles and responsibilities based on expertise and skills (Wu et al., 2021). Foster effective communication by encouraging open and transparent communication as well as ensure significant information are disseminated timely and accurately. Ensure regular team

meetings and proper handover processes to promote communication and exchange of information (Aaberg et al., 2019).

Support interdisciplinary collaboration among different professionals by creating opportunities for knowledge sharing, working together and contribution from various expertise. This can be in form case reviews, conferences, joint decision making and multidisciplinary ward rounds (Joubert & Reid, 2023). Promote continuous education and training by offering team members opportunities to improve their team skills through workshops or simulation activities solely on effective communication, problem solving, decision- making and conflict resolution. Encourage work setting that enable team to speak freely, express concerns and admit errors without fear of reprisal. Emotional or psychological safety supports open discussions, ability to learn from mistakes and continuous improvement (Chen & Gong, 2022). As well, as support and respect each other's roles through positive work behaviour and attitude. Support, monitor and measure the effectiveness of teamwork effectiveness through patient outcomes, staff satisfaction and assessments. Carry out regular review to identify areas for improvement.

The following literature are adopted to support operationalizing of teamwork: The effectiveness of teamwork in knowledge sharing has been identified as vital for improved performance among team, job satisfaction and quality care services (Nguyen et al., 2020). Various scholars highlighted the benefits of team work which has been noted to enhance safety of patient, quality, improved coordination, decision making, unified care plans, healthier means of handling complex tasks and better patient outcome (Aaberg et al, 2019; Chandrashekar & Mohan, 2019; Davidson et al., 2022). Further study supported that teamwork improves job satisfaction, efficiency, quality and expected outcome (Chandrashekar & Mohan, 2019).

Promoting and strengthening teamwork, (Diaz & Dawson, 2020) requires “shared mental models, mutual respect and trust and closed –loop communication” are the essential factors. Wu et al. (2021) emphasized the importance of effective communication in minimizing work overload, responsibilities are specified and each member should have a clear understanding of their role thereby, makes work activities seamless. O’Connor et al (2016) made some recommendations on how to encourage teamwork by creating an environment that foster teamwork and collective trainings for staff. Aaberg et al (2019) further emphasized on the importance of team collaboration and participation in decision-making as well as involving patients in decision-making process, which is a major element of healthcare process. Evidenced on item ‘i’, ‘ii’ and vii”

The multidisciplinary approach and complex nature of healthcare necessitates combination of various knowledge, skills, and attitudes. In this context, understanding and improving both team and the quality of work requires collaboration, respect and support from one another. For instance, in nursing, for a nurse to uphold his/her reputation regarding the competency at handling daily nursing care, the tends to ask for help from knowledgeable colleagues and gains the necessary support in ensuring meaning nursing services (Dinh et al., 2019). Evidenced on items ‘v’ and ‘vi’. Level of measurement was ordinal with Likert questionnaire to ascertain informants’ level of agreement or disagreement with the practice of teamwork using the range of scores 1 – 5 with survey tools:

Construct/variable 4 - Training and development: Operationalizing training and development in healthcare require employing planned tactic to recognize the workforce training needs, plan effective programs, support and promote continuous learning and professional growth. Thus, operationalization will facilitate organizational learning leading to improved staff

knowledge, competencies and skills, which will result to better-quality patient care and positive health outcomes.

Operationalization of training and development requires following steps:

Assess the training needs within the health institution to discover essential knowledge, competencies and skills training for each department through performance appraisals and challenges (Gil-Lacruz et al., 2019). Establish clear and specific training goals based on the identified needs and these should help to address the recognized gaps or performance deficiencies. Develop broad training programs and determine the most suitable training methods for the organization such as on the job training, online courses, mentoring programs and seminars. Develop a training calendar that outlines time and location of each training program. Coordinate and supervise various departments to ensure proper roster for staff training attendance without deterring daily operations or patient care. Deliver planned training programs according to the schedule and encourage interactive sessions, active participation as well as create opportunities for group discussion and case studies. Evaluate the training effectiveness through feedback and measure the skill attained and knowledge gained using quiz (Burgess et al., 2020). Examine the outcome to recognize improvement areas and modify for future training. Provide continuous professional development such as access to online resources, workshops, professional conferences, continuing education courses or webinars. Encourage workers to pursue certifications or advanced degrees to enrich their proficiency and knowledge.

Evidence that guides the items on data collection tools are supported by the following literatures: success and quality of healthcare are linked to the skills, knowledge and competencies of the employee thus, training, and development is a precursor for greater performance and better quality (Zahoor & Mustafa, 2020). Zahoor and Muhammad (2020) further buttressed that skills

and knowledge gained from training are great intellectual assets for the institution. Training and development improve employee's behaviours or nurture attitudes that will enhance quality and productivity. Evidenced on items 'i' and iv'.

Nicol et al. (2019) stated the need to enhance in-service training and development for health personnel's (supportive supervision, monitoring, mentoring, constructive feedback and seminars) because these will significantly improve the quality of care provided to patients. Further buttressed by (WHO, 2016), stated that health workers are a crucial element in reduction of medical error associated with knowledge gaps. Evidence reflected on item 'v' and 'vi'

Healthcare professionals will find it challenging to cope with changing technologies if not properly trained and relying on outdated knowledge will have a negative impact on quality of care. Zahoor and Muhammad (2020) highlighted the benefits of up to date training for the workforce as it facilitates provision of better care services and ability to handle challenging situations. The new technological era has made training and development a requisite for outshining and enduring in today's business environment including healthcare (Mgunda, 2019). Evidenced on item 'ii'.

Joao et al. (2019) opined that training and development enhances staff commitment and job satisfaction predominantly when they recognize the institution has interest in their career growth spending for their development. The staff feel more appreciated hence; attempt to contribute meaningfully to the institutional success leading to better performance, loyalty and quality service delivery.

Construct/variable 5 – Quality Healthcare: Operationalizing quality healthcare services includes implementation of strategies and practices to ensure effective and efficient quality service delivery. Ensuring consistent delivery of high quality care that meets patient's needs and expectations requires strategic use of Donabedian model. This entails evaluating the

three components of Donabedian model: structure, process and outcome through the following steps:

Structure

Evaluate the institution physical environment and available resources such as the hospital building, staffing levels, equipment and medications. Assess staff certifications and skills. Examine the organizational policies and procedures in place, such as guidelines for infection control, patient safety protocols, and accreditation status (Dunbar et al., 2021; LoPorto, 2020; Panteli et al., 2019).

Process

Assess the actual delivery of healthcare services, including the interactions between healthcare providers and patients. Evaluate compliance to guidelines and best practices. Evaluate the responsiveness, appropriateness, timeliness and effectiveness of treatment and care. Consider patient involvement in decision-making processes. Assess documentation practices, communication and information among staff and between staff and patients (Abdulsalam & Khan, 2020; Panteli et al., 2019 Sharkiya, 2023).

Outcome

Evaluate patient outcomes, such as full recovery, coping ability, complications, morbidity rates, mortality rates and adverse events. Measure patient satisfaction and experiences. Assess healthcare utilization such as readmission rates and length of hospital stay. Assess the populace health outcomes, such as health promotion, disease prevention and improved knowledge (AlOmari & Hamid, 2022; Ameh et al., 2017; Friedel et al., 2023).

Evidences that guide the items on data collection tool are highlighted below: Structure consists of the hospital facility appearance, location, equipment, cleanliness, human and financial

resources, cleanliness, accommodation (LoPorto, 2020; Panteli et al., 2019). Examples include staff neatness, competency, and trainings. Evidenced on items ‘i, ii, iii, iv, v, vi and vii’.

Process encompasses the patient waiting time, communication with patients, responsiveness to patients, professionalism, friendliness, drug supply and patient involvement in care (Panteli et al., 2019). Evidenced on items ‘viii, ix, x, xi, xii and xiii’.

Ameh et al., (2017) described outcome as patient functional ability, recovery, and reduced mortality, improved knowledge through health education, reduced hospital stay, disability, and lack of complication and / or death. As well as patient experiences and satisfaction regarding the service provided.

Study Procedures and Ethical Assurances

Over the years, ethical consideration regarding the research participants has become an integral part of research. Although, there has been a universal ethical standard for research involving human, which has, been advocated by several literature because of its high significance in ensuring individual safety (Saunders et al., 2019; Than et al., 2020). There is need to ensure that the established guidelines and rules on ethical research conduct are adhered to in order to protect the participants dignity and privacy.

In accordance with UNICAF university ethical guideline, approval was received from the University Research Ethical Committee (UREC) as well as the Health Research and Ethical Committee (HREC) in Lagos-Nigeria prior to data collection. As a result of human subjects involved, the participants were assured of discretion and anonymity with a right to withdraw anytime they want without explanation. There are sets of ethical principles that underpins research particularly a study involving human subjects to prevent misconduct and violation of individual’s rights. Some of these ethical principles are discussed below:

Confidentiality and Anonymity: Lee (2022) stipulated that confidentiality and anonymity are the main step towards protection of the subjects from likely harm. Confidentiality entails strictly withholding the identity of the respondents even when the researcher in case of interview knows the identity. While, anonymity signifies that the researcher particularly in studies using anonymous questionnaire does not know the identity of the subjects.

Hence, collection of data involved clear protection of subjects' identities. The information collecting tool do not any form of identification that can be possibly be used to identify or recognize the subjects such as names, telephone numbers, address or any other sensitive information about the participants. Dougherty (2021) opined that maintenance of the participants' anonymity enhances the consistency of the data gathered from the informants especially in sensitive subjects. Therefore, prior to instrument distribution, the participants were assured of privacy and secrecy through a short message on the data tool as shown below:

“Please be informed that all information will be handled with utmost confidence and absolute secrecy. Therefore, the data you gave will not influence your work status or engagement now or in future as this research is entirely for educational purpose.”

Informed Consent: Acceptance to partake in a study was guided by informed consent, which is a willful, knowledgeable and voluntary consent of an individual to participate in a study when an adequate information has been provided clearly and elaborately to the subjects in a language of understanding (Saunders et al, 2019). The principle of truthfulness, not to lie to participants is recognized as a respect due to every person. Truth telling is backed by the principle of deontology (actions that confirms to one's obligation). Deontology have ethical guidelines that disallow dishonesty, to respect the participant's autonomous right and upholding research ethical principles (Lee, 2022; Rana et al., 2021). Thus, the participants were given detailed information

on the research objectives, its benefit to the society, length of the study and what they are expected to do. They were assured of privacy and liberty to refuse partaking or move out from participating anytime they feel like without explanation. Subsequently, informed consent was obtained through a well-filled declaration form.

Protection of participants: The principle of non-maleficence demands protection of participants from harm, unpleasant effect or other research-associated risk that can have negative impact on their mental, social, economic, psychological or physical well-being. The significant element of ethical principle is protecting of subjects from danger or adverse effects secondary to research action. This backs the principle of non-maleficence with an obligation not to harm or reduce potential harm (Varkey, 2021). The investigator has a duty to prevent intentional as well as minimize likely harm from the participants hence, assessment of the possible harm and the benefits of the study needs to be conducted and considered to decide whether to continue or not. The major harm will be failure to protect the participant's identity but exact anonymity was maintained because the researcher guarded the participants' individualities (Roth & Von Unger, 2018). Protecting participants from harm involves working with their own time to avoid any form of harassment or jeopardizing of their job.

Deception: Deception is a significant ethical concern and is a 'deliberate falsification of evidences connected to the purpose, nature, or significances of an investigation' (Wendler, 2022). Deception could occur during recruitment phase whereby participants are not truly informed about the type of study and what it entails or could be failure of the researcher to provide information on how the research will be conducted. Ethical principle requires giving participants accurate information regarding their involvement similarly; the investigator should give clear and honest description of all stages of data collection process. Deception can also be in form of providing

inaccurate sample size or constructing, changing, omitting or withholding data findings and these acts can have negative consequences. However, Rahwan et al. (2022) argued that some covert study and deceptive practices although controversial still have a place in research specifically, if the study intends to observe the participants in their natural setting without their knowledge.

Steps to Maintain Good Ethical Conduct: The following steps were adopted on various points of the research process such as communicating and expounding of the study subject, obtaining entrance, collection, processing, storage, exploration and reporting of the results to ensure good ethical behavior was maintained.

The researcher recognized the obligation to clearly and extensively communicate and clarify the research aim and benefits to the participants, associated risk or any conflict of interest that might arise.

Gaining access to the study area requires institutional and research ethical approval hence, due protocol for obtaining ethical approval was followed. Required forms and documents were submitted to appropriate research ethical committee for review and approval. The investigator ensured the rights of the participants to give informed consent, privacy, anonymity and to ask questions were maintained.

During data collection process, the investigator reviewed and ensured the ethical principles were adhered to particularly, the right of participants to confidentiality, anonymity and avoidance of deceptive practices. The data collection instruments were not designed to request for name, telephone number, address or any information that will reveal the participants' identity. At the same time, coercing participants to provide information was circumvented through close-ended questions and they were assured they could withdraw from participating whenever they like without explanation. However, the study consists of individuals with the capacity to freely give

informed consent while, the individuals without the mental ability or the capacity to provide informed consent were not included.

Processing and storing of data entails placing the data in a secured cupboard or container only accessible to the researcher as well as adhering to confidentiality and anonymity principles.

Analyzing data and reporting of the findings requires that all ethical principles be maintained. Thus, any form of data omission, alteration or fabrication was avoided. Consideration was also given to respondent's right to withdraw from the study prior to publication of the findings.

The Role of the Researcher: The responsibility of the scholar entails conducting methodical investigation and analysis of the chosen topic in order to contribute to the expansion of knowledge, solve problems and add to existing knowledge in healthcare. This involves certain steps such as first, the development of research objectives, study scopes and formulation of research questions or hypotheses. Second, extensive review of several related literatures to understand present awareness in the area of study and to identify gaps for further exploration. Third, selection of appropriate methodologies, sampling, data collection technique and method of analysis with considerations to ethical assurance. In addition, to maintain the reliability and validity of the design. Fourth, is data collection using survey method- questionnaire attempting to maintain accuracy, reliability and the quality of data. The fifth step was descriptive analysis of collected data collected using (SPSS) Statistical Packages for social Sciences. Additionally, partial least square structural equation modeling (PLS- SEM) a methodology for evaluating relationships between variables was adopted. The final stage is interpretation and reporting of findings.

However, during the entire research process the researcher might encounter certain problems such as: (a) failure to develop proper research design that aligns with the study objectives, inappropriate methodology, and data collection and analysis techniques. (b) Another

challenge may arise from inability to conduct a comprehensive literature review to identify current knowledge and gaps in the area of study. (c) Challenges might arise from gathering accurate and reliable data associated with method of participants' recruitment, quality of data collected or adhering to ethical guidelines. (d) Challenge may be encountered in analysis and interpretation of data collected if appropriate statistical techniques were not adopted, poor data management and inability to create valid and reliable interpretations. (e). Often the researcher personal and professional experience might have an undue influence on the study resulting also to research bias.

Bias can be described "as any trend or deviation from the truth in data collection, data analysis, interpretation and publication which can cause false conclusions" (Florczak, 2022, p. 20). It could happen at some research phase such as during selection, choosing study design, collection of data and analysis as outlined above. However, the researcher should ensure provision of measures to avoid or minimize bias in order to generate reliable and valid research findings. Below are some identified bias and possible means to address them:

Table 3. 5

Potential Bias

S/N	Types of Bias	Description	How to Address the Bias
1.	Selection and Sampling bias	This bias can occur during study population identification. The subjects selected are not representative of the target population.	-Ensure adequate number of participants using simple random sampling. -Report the actual numbers and sustain at least 80% participation.

			-Define the characteristics of the study participants and ensure the demographics matches the target population.
2.	Data collection bias	When the researcher allows personal preferences to control the established data collection method and misleading survey question instead of what would be in the best interest of the research context.	-Strict adherence to standardized data collection procedures to ensure reliability. -Adapting or adopting previous validated survey questions
3.	Analysis Bias	When the researcher specifically sorts and interprets data, samples that support own beliefs, experiences or expectations. Also, when findings are fabricated, outliers eliminated or statistical tests that are inappropriate used.	- Adopt explicit analytical outline or coding schemes to guide data analysis and interpretation to reduce personal biases and enhance consistency in interpretation.

4.	Reporting bias	When the researcher fail to clearly interpret data by altering or omitting vital details leading to prejudiced presentation of findings.	-Avoid changing or omitting of data information. -Ensure accurate data interpretation and analysis.

Since scientific researches' are constructed on the foundation of previous or existing studies, it is crucial that researchers adhere to all research ethical assurances, be of good behaviour and ensure fairness and respect in interactions with colleagues and the participants. The researcher is obliged to provide a credible study that will be beneficial to the society without inflicting harm to others thereby, gain further gain the colleagues and societal trust by contributing to existing knowledge.

Data Collection and Analysis

In a quantitative study, data collection can be through various techniques such as survey, a means of distributing questionnaire to large sample size, through observation by observing the subjects in a natural workplace setting, through experimental by manipulating the variables to generate time- dependent results or through secondary data with the use of existing data (Saunders et al, 2019). However, the data collection approach favourable for this study was survey using close- ended questionnaire as a result of the unique nature of the constructs of study. Also, structured questionnaire will help to generate primary and large data from great number of participant which will enhance objectivity and generalizability associated with large sample size.

Thus, primary data was collected from a sample size of 385 healthcare personnel's considered appropriate for the study in the natural hospital environment using structured

questionnaire and online questionnaire. An approach that remarkably assist to generate many and quick responses. For recruitment of the participants, the investigator went to relevant departments in the hospital to administer the questionnaires face-to-face to the participants. Prior, to administration verbal approval was sought and obtained from various unit heads/managers. Alternatively, online method could have facilitated data collection via staff email but that was constrained due to lack of access to the participants' email rather, on investigator's proposal some head of departments, were willing to share the questionnaire already converted to google document on their professional group platforms such as WhatsApp. This helped to generate speedy response from the selected informants and it was easy to use (Adelia et al., 2021). The numerical data collection enabled the researcher to provide a detailed description of the research problem, situation or relationship between variables (Sharma, 2019) and easy for the participants to understand the questions and select their suitable answer from the options available.

The data collected consisted of demographics, human resource management practices and quality related experiences. The participants were briefed about the study aim and approval was obtained before distribution of questionnaire. To avoid double participation, respondents were asked to partake once either via google form or the hard copy. Whereas, to circumvent multiple responses via online form, the survey ID generated automatically inform the participant of the initial submission made. Questionnaire were given out on certain dates and retrieval process went on several weeks as the participants completed and returned the documents at different dates. In addition, on the online platform questionnaire filling continued, as participants complete and submitted their responses. All the questionnaire distributed manually were numbered for easy tracking and to support smooth retrieval of the administered copies. The data instruments collected and retrieved were collated, stored and processed.

Analysis: Data analysis is a rigorous and scientific process that ensures collected data are converted to a meaningful information hence, data are prepared prior to use for analysis (Taherdoost, 2020). The method of data collection and analyses enabled the researcher to make inferences regarding the research findings (Ali, 2021). Structural equation modelling (SEM) a popular technique used to evaluate complex linear relationship between exogenous and endogenous latent variables was adopted (Hair et al, 2021). The two models applied are the measurement and structural model. Measurement model defines the connection between each indicator and their latent whereas, structural model describes the inter-relationship between various constructs in a model whether direct or indirect (Herwin et al, 2022). However, there are certain steps required for data preparation and they are outlined thus: The first step was data coding and it involves converting of data to numerical values for example, coding ensure that the responses from the sociodemographic section of the questionnaire were assigned numerical values accordingly. While, the rest of the data has already been assigned with ordinal five- point Likert scale. Second phase is data entry process which ensure the coded data are entered into an excel spreadsheet either manually or through statistical program. Third step entailed devising an approach to detect the missing data, which occurs when some respondents fail to provide answers to certain questions (Taherdoost, 2020). After the above- mentioned steps, the data analysis was achieved through the following methods.

Descriptive analysis: This is the mostly the first data analysis method used to sum up large volumes of data in order to determine the standard deviation and the central tendency of the data, although mean, median and mode are the three major method with mean the mostly preferred method (Taherdoost, 2020). For this study, it created better insight into the consistency or reliability of the responses generated which is most useful with large sample size and enhances

provision of necessary information and understanding (Fulk, 2023). Thus, descriptive analysis was used to gain initial classification of the dimensions of human resource management that influences quality healthcare.

Structural Equation Modelling (SEM)

Structural equation modeling is a broad statistics method for testing hypotheses as well as evaluating the link between the observed and latent variables (Hair et al, 2021). The measured variable in the data collected is known as observed variables whereas, latent variables cannot be measured directly but its measurement relies on linking latent variable to observed variables. Owolabi et al. (2020) stipulated that the ability of structural equation modeling to establish relationships through sets of data collected enhance its notable appropriateness for hypothesis testing in comparison to other methods of analysis. Another distinct feature of SEM is to clearly represent measurement error although, it could not provide restitution for the weakness but it helps to minimize error (Owolabi et al., 2020). For this study, a multivariate analysis technique was used in combination with path analysis models and regression to scrutinize the association amid the measured variables and the latent constructs (Ajayi & Adebayo, 2021).

Path Analysis: Path analysis investigation of the underlying link between variables (exogenous and endogenous) by generating a path diagram. Exogenous variable is considered not to be influenced by other variables but it can influence others. Whereas, endogenous variables are thought to be influenced by other variables (Rasyidah et al, 2021). It provides estimate of the degree and significance of hypothesized causal links between the observable variables as well the direct and indirect casual effects (Fan et al, 2016). Furthermore, (Douma & Shipley, 2023; Rasyidah et al., 2021) postulated that direct correlation occurs when a variable (e.g., HRMP) is related to another variable (e.g., QHC). On the other hand, indirect correlation is associated with

a variable linkage to another through a mediator or a third variable. Occasionally, the data may not reveal easy to describe relationship pattern and when the linearity assumption is not achieved, nonparametric regression model is employed.

Although, the major benefit of path analysis is the great ability to identify relationships and a “typical rule of thumb in conducting path analyses is to have at least 200 or 250 observations” which correspond with the size of the sample and the amount of data collected (Fan et al, 2016). Conversely, path analysis is restricted solely to observable variable and through its diagram provide a visual illustration of the relationships between the concepts represented by latent variables (Rasyidah et al., 2021).

Regression Analysis: Regression analysis was conducted to define the link among variables that have cause - effect relationship as well as make predictions (Bzovsky et al, 2022; Tyagi et al, 2022). For example, in generating an answer to the alternative research hypothesis: “There is a significant relationship between human resource management practices and quality healthcare. Regression analysis helps to determine relationship, strength of the relationship and the likelihood of making future predictions regarding the dependent variable (Ali & Younas, 2021). For this study, a univariate regression analysis was used due to one single independent variable in the study. By adopting univariate, regression analysis the link between independent and dependent variable are investigated and the calculation signifying the linear relationship between the two variables formulated.

Partial Least Square Structural Equation Modeling (PLS- SEM)

Partial least square SEM is a statistical technique used for analyzing the relationships between observed variables and latent constructs in a structural equation model (Hair & Sarstedt 2019; Hanafiah, 2020). According to Hair et al (2022) PLS- SEM becomes vital when the study

objective is to predict and explain findings. It is noteworthy that PLS- SEM is ideal when the data is not normally distributed and there is asymmetry in the data set (skewness) unlike CB- SEM that requires normally distributed data. This technique was selected due to its appropriateness in predicting and developing theory unlike CB –SEM that test and confirm theory (Dash & Paul, 2021; Sarstedt et al, 2021). Therefore, the hypotheses were tested and their predictability evaluated through PLS- SEM while, the relationships between different constructs and the indicators was assessed using a composite process. PLS-SEM enables estimation of complex models involving various latent and observed variables a significant attribute based on current findings that proposed including more observed variables for measurement of conceptual variables (Rigdon et al, 2019). This characteristic enhances the reliability of composite measures and leads to a decline on common factor indeterminacy (Hair & Sarstedt 2019). Although, PLS –SEM largely known for small sample size but, its computational efficiency, makes it suitable for large datasets and it can provide reliable estimates without the computational burden associated with some covariance-based SEM methods (Sarstedt et al, 2021).

A further review of literature (Hair & Sarstedt 2019) revealed that another strength of PLS- SEM lies on its ability to include all specific and error variance from independent variables, which CB- SEM would have ignored, and justifiably use it to predict dependent variable variances. However, its drawback lies on including some error variances that assist to predict the dependent variable. According to (Rigdon et al. 2019) the composites process of PLS- SEM supports its measurement technique and the area of application. PLS- SEM technique yields a determinate score for individual construct immediately the weights are obtaining unlike, the factor based SEM, which produces indeterminate scores for the constructs that will negatively affects the validity of the results. PLS-SEM explanatory power enhance the estimation method and the ability to compute

the determinate construct score makes this approach compatible for prediction (Sarstedt et al., 2021).

Overall, the use of PLS-SEM enables scholars to obtain adequate knowledge of the causal relationships resulting from logic (explanation) and theory in addition to its predictive power, which is key for establishing the model's practical relevance (Hair & Sarstedt 2021). PLS-SEM is often preferred in situations where the emphasis is on prediction rather than on testing complex theoretical models. The rationale for using PLS-SEM lies in its ability to predict outcomes, flexibility, non-normally distributed data, and the ability to handle complex models and various types of measurement structures.

SEM Analysis: Structural equation modelling consists of two techniques with different assumptions regarding the plan for basics of conceptual models in statistical analysis. First, factor-based SEM methods- implemented by AMOS OR Mplus software program experientially exemplify the conceptual variable that employs communal factors involving solely communal variance that expounds the covariations between their related indicators (Hair & Sarstedt, 2019). Second, composite-based SEM methods, such as PLS-SEM and generalized structural component analysis (GSCA) embrace entire variance to progress linear combinations of indicators to form composite variables that experientially characterize the conceptual variables (Khan et al, 2019).

Rationale for SEM Technique: Path analysis was implemented because the model fit large sample size of 200 and above corresponding with the quantitative large sample size for unknown population (Shete et al, 2020). Additionally, Memon et al (2020) empirically suggested 160 to 300 valid observations as fitting for SEM. The ability of regression analysis to decide the cause-effect link amongst the variables makes the method most suitable for this study. Since, the goal of the investigation is to found the link between dependent and independent variables, linear regression

would provide answer to the hypotheses in terms of relationship as well as the strength of the associations (Ali & Younas, 2021). SEM integrates the measurement model (relating latent variables to their indicators) and the structural model (relating latent variables to each other) into a unified framework, providing an all-inclusive view of the relationships under study.

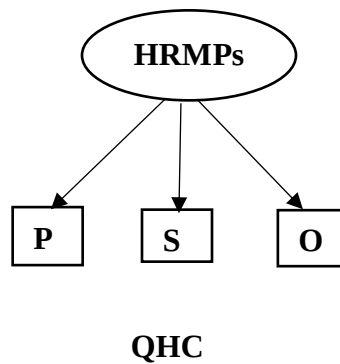
Reflective Models: This study adopted reflective model comprising of Human resource management practices (HRMPs) and quality healthcare. The selection was based on the assumption that HRMPs (predictor) determines the quality of healthcare services provided (outcome). According to (Hair et al, 2019), this involves assessing the outer loadings, internal consistency reliability and discriminant validity. The outer loadings are anticipated to provide acceptable reliability that will account for above 50 per cent of the indicator's variance. Another metric in measuring the quality of SEM is the internal consistency reliability proposed by (Joreskog, 1971) which is preferred to Cronbach's alpha because it produces higher values of 0.6 and 0.7 which are appropriate and acceptable for research that are exploratory in nature (Hair et al., 2019). This is followed by discriminant validity of the constructs that elucidates pragmatically the extent to which a construct differs from another in the structural model using heterotrait-monotrait ratio (Henseler et al, 2015)

On confirmation of a satisfactory reflective measurement models (Hair et al., 2019) highlighted the importance of assessing the structural model established in this study as recommended in PLS-SEM literature. The study adopted the standard assessment criteria comprising of coefficient of determination (R-squared), the statistical significance, and relevance of the path coefficients.

Reflective Measurement Models: The two reflective models in this study are human resource management practices and quality healthcare. The selection of reflective model was

constructed on the supposition of HRMPs (indicators) and the (latent variables) quality of healthcare services provided. In a reflective model, alterations in the indicators would lead to variations in the construct, as each indicator could individually influence the overall construct (van Amelsvoort et al., 2020). The latent construct exists independent of the indicators, this implies that because of the interchangeable nature of the indicators, the latent variable will continue to exist despite removal of one or two indicators. This study indicator consists of reward system, recruitment, teamwork and training and development (HRMPs) while, the latent variables include structure, process and outcome (QHC).

Reflective Measurement Model



3.8. Summary

This section discussed the research methodology and data collection method. A detailed view of the quantitative research design adopted was described and its appropriateness for the study. The chapter also described the study population (healthcare professionals) and technique for sample selection, which is simple random sampling. This was based on the nature of shift duties predominant among health workers, as the sampling technique aid recruitment of participants when they are available at work. To answer the research questions and test hypothesis, data was collected using survey technique in a questionnaire format manually and through online method. In addition, some likely biases on the study were identified and discussed.

The use of questionnaire and its suitability for this study was discussed in relation to the research objectives described in chapter 1. This section further outlined the consideration placed on formulation of measurement instrument and operationalization. The questionnaire was formatted using a Likert scale of 5 to generate the participants' views on the studied constructs. Pilot testing was conducted to ascertain the validity and reliability of the measurement tools. The outcome of testing using combined tools such as exploratory factor analysis (EFA), principal component analysis (PCA), and Cronbach Alpha's reliability check led to reduction of measurement tools from 63 to 39. Reliability and validity check was believed to be satisfactory, and data collected can contribute to reliable findings. However, in accordance with recognized ethical research guidelines and conduct, there was strict adherence to ethical considerations. Thus, ethical approval was gained from UREC and the health institution research governing body prior to data collection. Data analysis method PLS- SEM considered fit for analyzing the generated data was adopted to support positive outcome for the study.

CHAPTER FOUR: FINDINGS AND EVALUATION

Introduction

This chapter presents evaluation of findings on the impact of human resource management practices on quality healthcare in Lagos Mainland, Nigeria. The study aimed to reveal how HRM practices such as reward system, recruitment, teamwork, training and development affect patient health outcome and efficiency.

Overall, the section consists of the presentation of the trustworthiness, reliability and validity of data, analysis of data collected, and evaluation of findings. The constructs were underpinned by ontological realities of healthcare framework with focus on establishing axiological meaning, which can improve quality healthcare services. The questions in the questionnaire are related to the objectives of the study.

The research model was developed with structural equation modelling approach while, the theoretical underpinning was derived from Herzberg's two-factor theory of motivation (Mitsakis & Galanakis, 2022) and Donabedian model of quality care (Donabedian 1988; LoPorto, 2020). The theoretical contexts from the aforementioned theories were constructed on extensive review of literature that formed the groundwork for operationalization of the measurable variables and development of measuring instrument. The sixteen hypotheses derived from the previous section were verified using path coefficients.

Hence, a cross-sectional survey with a closed-ended Likert scale questionnaire was used for data collection. A random sampling technique was adopted to administer the questionnaire based on the inclusion and exclusion criteria defined for the study. All the data collected were subjected to a process of verification for accuracy and completeness. The variables were classified in particular order based on significance with the use of loadings of the measured variables for reflective constructs. In addition, the exogenous nature of variables suggests a

likelihood of not having an impact on the exploratory study, leading to selection of partial least square structural equation modelling (PLS-SEM) as an ideal (Sarstedt et al, 2021).

Structural equation modelling was adopted and validated using reflective measurement model and structural model. Five thousand (5000) subsamples were generated through a bootstrapping technique and the procedure carried out as path coefficients in PLS, the result produced examined the hypotheses. The essence was to scrutinize the manner in which the predictors and outcomes interact with each other. The hypothesis can provide deeper insights into how each human resource management practices influences quality healthcare. Therefore, 16 alternative hypotheses were tested and 7 out of the 16 tested hypotheses were accepted because they revealed statistical significant relationships between the predictor and outcome while, 9 hypotheses were rejected. A detailed discussion of hypotheses test, significance and the extent of relationship will be discussed later in this section.

Trustworthiness of Data

The trustworthiness of quantitative data is contingent with certain factors such as data collection technique, data quality and context in which it was used. The trustworthiness of this data relies on rigorous data collection, appropriate analysis, transparent reporting in terms of clear documentation of all the methods used, transparent reporting of the data and assumptions made. In this study, trustworthiness of data was examined and it enlightens the ontological strength of data measured to reveal the conceptual realism of the study goal (Saunders et al, 2019).

Thus, source of the data was credible and reliable, 357 primary data well completed were collected through survey method from the selected health professionals in the chosen health institution. The tools used to collect data was tested for validity and reliability to ensure the instrument capacity to accurately evaluate what it is anticipated to assess and produce consistent results (Florczak, 2022; Surucu & Maslakci, 2020). However, validity and reliability

test as indicated by (Hair et al., 2019) entailed investigating: first, the outer loadings, evaluated strength of the association amongst observed variables and latent constructs, indicating how well the variables represent and contribute to the underlying constructs. Second, reliability internal consistency ensures that measurement instruments consistently and accurately measure latent constructs, enhancing the model's trustworthiness by minimizing measurement errors and increasing result validity. Third, discriminant validity was evaluated with the use of heterotrait-monotrait ratio (HTMT) to ensure that different constructs are different by equating the relationship between dissimilar constructs with the ones within the similar constructs.

Hence, a comprehensive discussion of these analyses will be provided in the subsequent section. In addition, the researcher endeavored to maintain quality of data by ensuring information free from errors and inaccuracies, by adopting an appropriate technique and measures. This was done by ensuring data were broad and covered all relevant aspects of the phenomenon of study, checked for uncompleted or missing information that can result to biased or incomplete conclusions. In addition, implemented appropriate statistical methods significant for drawing valid conclusions from quantitative data. Therefore, this study embraced structural equation modelling to examine correlation between the study's constructs however, the details of the methodology employed was elaborately discussed in chapter 3.

Reliability and Validity of Data

Concepts of reliability and validity from ontological viewpoints informs the nature of reality in quantitative research data, this notion is relatively stable, objective and devoid of the researcher perception. To enhance the study dependability and validity, the measurement model was validated (Surucu & Maslakci, 2020) using appropriate assessment criteria. This involved the use of suitable evaluation technique based on established rules of thumb guidelines (Hair et al., 2020; Sarstedt et al., 2020) as specified in literatures. However, implementation of these guidelines is determined by the research uniqueness. Thus, with a view

to eliminate likelihood of generating findings by “chance” the researcher adopted p-value and t- value, the two approaches that determine a study statistical significance.

Reliability relates to the consistency of data, the processes and the results when the data are collected repeatedly. While, validity is viewed in terms of internal and external validity. Internal validity reveals that findings rely solely on the influence of the independent variables of the study and not on extraneous variables. External validity is associated with the sample representativeness and the possibility of generalizing the results to the target population (Riazi et al, 2023). Therefore, the research assessed reliability and validity; conform to the recommendations outlined in existing literature (Hair et al., 2019). The credibility of the data was maintained as raw data was compared and verified by individuals not directly involved in the study with the data entered in SPSS. To corroborate transferability, healthcare personnel with sufficient knowledge of the study problem were chosen for the investigation. Furthermore, the data collection tool was operationalized to fit quality healthcare and human resource management practices in the background of Nigerian health system. For confirmability of the research, quantitative research approach and the scientific analysis techniques considered appropriate was adopted and has been extensively described in chapter 3.

Data reliability was improved by cross-referencing the information inputted into Microsoft excel with the original field data, a process overseen by two individuals uninvolved in the research. To ensure participants could relate their current experiences to the study, the questionnaire was meticulously crafted, aligning questions with the four key concepts under investigation. Chapter 3 thoroughly outlines the quantitative research methodology and the structural equation modelling approach employed, providing a comprehensive guide for future researchers aiming for the study replication. This subdivision explored confirmability of the study using chosen structural equation modelling approach and further assessment by

evaluating the results of the model. The reliability of the data was ensured by employing methods recommended in the literature (Saunders et al., 2019).

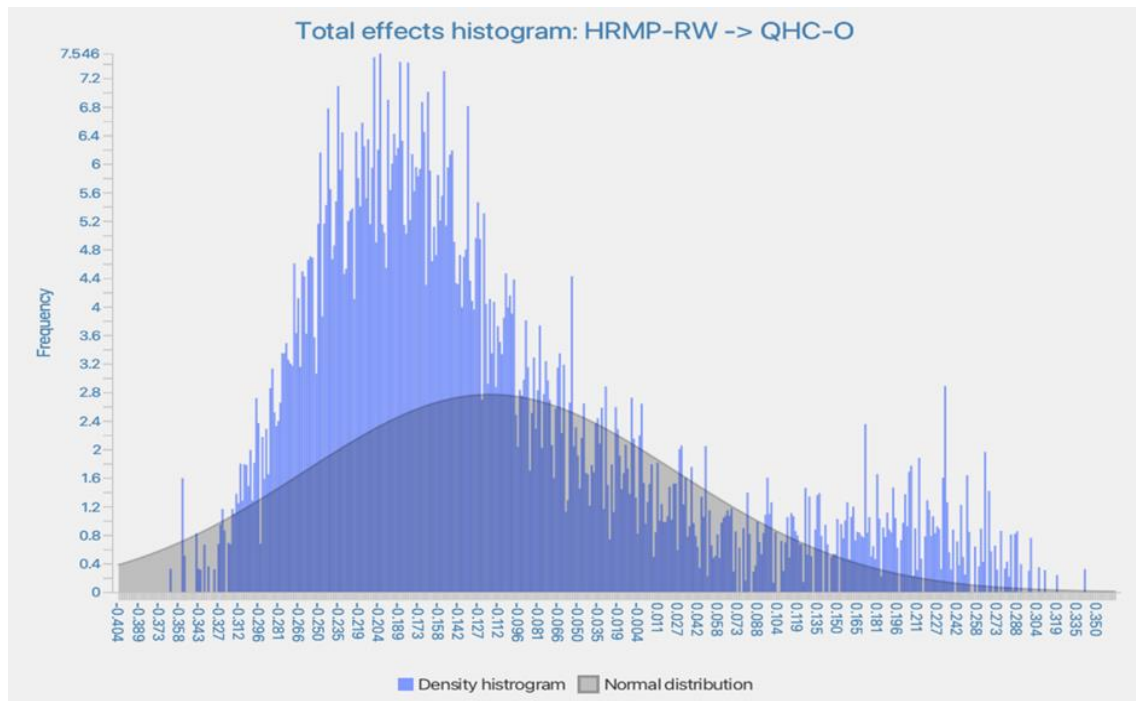
Validity can be categorized into two main types: internal validity, which assesses the accuracy of the measurement and test itself, and external validity, which evaluates the ability to apply the findings to a broader population. Both aspects are crucial for evaluating the suitability, significance, and utility of a study. Reliability, on the other hand, focuses on the consistency of the measurement tool employed in the research. For instance, if researchers utilize a questionnaire for data collection, there is need to ensure reliability of that tool. This means that if the same questionnaire survey is repeated on the same sample thereafter, under unchanged conditions, comparable results will be obtained. This concept is known as test-retest reliability. A measurement cannot be considered valid unless it is reliable; for it to be relied on as an accurate depiction of a research concept, it must demonstrate both validity and reliability.

Evaluating the Structural Equation Models

Partial least square structural equation modelling (PLS- SEM) was adopted instead of covariance- based structural equation modelling (CB- SEM). Unlike the outcome of this study, CM- SEM is favoured when the samples follow normal distribution. On the contrary, PLS- SEM was chosen because it provides a nonparametric option that does not depend on assumptions of normal distribution as provided in the figure below:

Figure 4. 1

Example of non-parametric distribution of data points, supporting the adoption of PLS-SEM

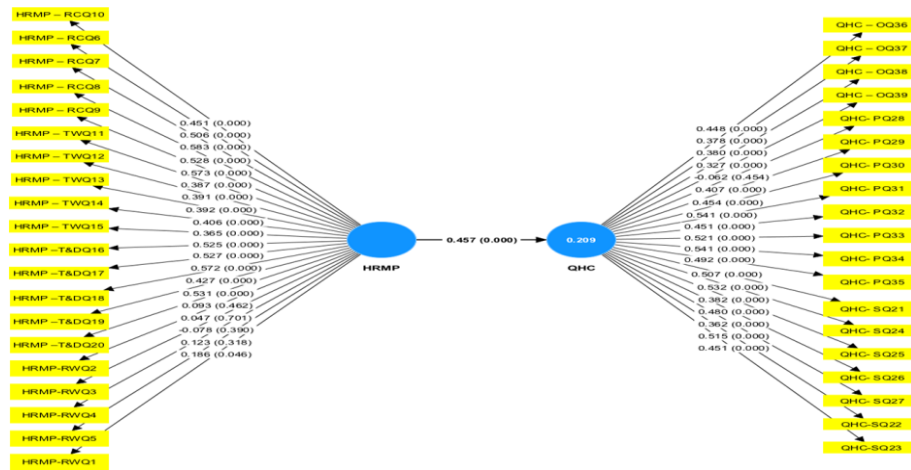


In this study, two structural equation model were developed. First model investigates the extent of the direct causal correlation between human resource management practices (HRMP) and quality healthcare (QHC). The relevant measured variables were directly linked to each construct. In the second model, each of the two latent constructs – HRMP and QHC, were broken down into sub-constructs. Human Resource Management Practices has the following sub-constructs and associated survey questions are as follows: Reward System (HRMP-RW): Q1, Q2, Q3, Q4, and Q5; Recruitment (HRMP – RC): Q6, Q7, Q8, Q9, and Q10; Teamwork (HRMP – TW): Q11, Q12, Q13, Q14, and Q15; and Training and Development (HRMP –T&D): Q16, Q17, Q18, Q19, and Q20. Similarly, Quality Healthcare has the following sub-constructs and associated survey questions as follows: Structure (QHC-S): Q21, Q22, Q23, Q24, Q25, Q26, and Q27; Process – (QHC- P): Q28, Q29, Q30, Q31, and Q32; and Outcome- (QHC – O): Q36, Q37, Q38, and Q39. Both models are displayed in

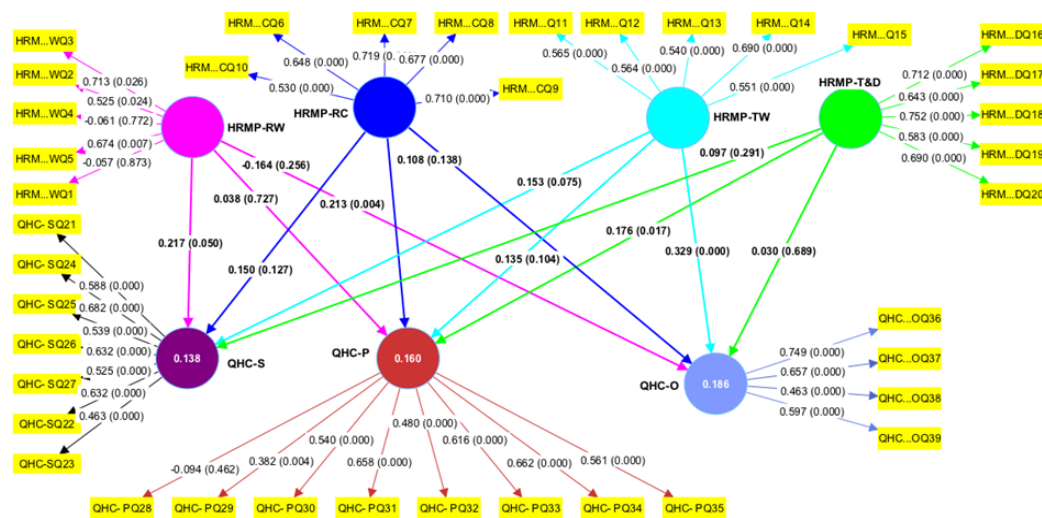
Figure 4. 2 and Figure 4. 3.

Figure 4. 2

Model 1 Direct causal link between HRMP and QHC

**Figure 4. 3**

Model 2 Direct causal link between the measured sub-latent dimensions of HRMP and the sub-latent dimensions of QHC



Assessment of Reflective Measurement Model

This section objective is to offer an assessment of reliability and validity of the models. The evaluation will be in two folds; the reflective models for both models, and evaluation of the entire structural equation models grounded on R-squared criterion. The research assessed reliability and validity, adhering to the guidelines outlined in existing literature (Hair et al., 2019). In model 1, the study demonstrated that HRMP is approximately 21% of the variability

observed in QHC (Quality of Healthcare). This finding indicates a significant impact of human resource management practices (HRMP) on healthcare quality. Detail discussion on this relationship will be provided later in this chapter.

This validity approach relies on certain general principles outlined in existing literature. However, the application of these principles depends on the specific requirements of the study. The defined p-values are as follows: $p \leq 0.01$ (indicating extremely significant statistical results), and $p \leq 0.05$ (indicating significant statistical results). P- value is for screening purpose and p- value less than 0.05 help to prevent Type 1 error. Once more, a prediction is deemed statistically significant when the t-value exceeds the critical threshold of 1.690 ($t(\alpha/2) \geq 1.690$), with $\alpha=0.05$. The greater the t value the better the extent of comparison that is a unique predictor for the two variables. As suggested in model 1, HRMP and QHC are considered reflective in nature because this study assumes that HRMP practices such as reward system, recruitment, and teamwork, training, and development influences quality of healthcare through the structure, process and outcome. Evaluation process for this study as outlines in the literature involves examining of the outer loadings, internal consistency reliability and discriminant validity (Hair et al, 2019).

Outer Loadings

First, “the confidence interval bias corrected and accelerated (BCa) bootstrapping” was employed with 5000 subsamples to establish significance at a two-tailed alpha level of 0.05 (resulting in a 95% confidence interval) for Model 2, where the hypotheses were derived. The significance of implementing BCa approach is to correct bias, distribution skew or lack of symmetry in the estimate. As indicated by (Hair et al, 2019) it is anticipated that the outer loadings will provide satisfactory item reliability by explaining more than half of the indicator's variance and the recommended value is usually 0. 708. Outer loadings with indicators of >0.5 in descending order are presented in table 4.1.

Table 4. 1*Outer loadings in descending order where 32 indicators have loadings >0.5*

Outer Loadings	Initial sample	Standard deviation	t-statistics	p-values
HRMP –T&DQ18 <- HRMP-T&D	0.752	0.127	5.900	0.000
QHC – OQ36 <- QHC- O	0.749	0.064	11.644	0.000
HRMP – RCQ7 <- HRMP- RC	0.719	0.052	13.745	0.000
HRMP- RWQ3 <- HRMP-RW	0.713	0.320	2.226	0.026
HRMP –T&DQ16 <- HRMP-T&D	0.712	0.100	7.104	0.000
HRMP – RCQ9 <- HRMP- RC	0.710	0.059	12.017	0.000
HRMP –T&DQ20 <- HRMP-T&D	0.690	0.151	4.583	0.000
HRMP – TWQ14 <- HRMP- TW	0.690	0.053	13.027	0.000
QHC- SQ24 <- QHC- S	0.682	0.071	9.543	0.000
HRMP – RCQ8 <- HRMP- RC	0.677	0.058	11.749	0.000
HRMP-RWQ5 <- HRMP- RW	0.674	0.250	2.699	0.007
QHC- PQ34 <- QHC- P	0.662	0.073	9.113	0.000
QHC- PQ31 <- QHC- P	0.658	0.079	8.293	0.000
QHC – OQ37 <- QHC- O	0.657	0.075	8.723	0.000
HRMP – RCQ6 <- HRMP- RC	0.648	0.075	8.682	0.000
HRMP –T&DQ17 <- HRMP-T&D	0.643	0.096	6.704	0.000
QHC- SQ26 <- QHC- S	0.632	0.073	8.653	0.000
QHC- SQ22 <- QHC- S	0.632	0.075	8.419	0.000
QHC- PQ33 <- QHC- P	0.616	0.080	7.694	0.000
QHC – OQ39 <- QHC-O	0.597	0.088	6.799	0.000
QHC- SQ21 <- QHC- S	0.588	0.077	7.634	0.000
HRMP –T&DQ19 <- HRMP-T&D	0.583	0.163	3.576	0.000
HRMP – TWQ11 <- HRMP- TW	0.565	0.085	6.654	0.000
HRMP – TWQ12 <- HRMP-TW	0.564	0.074	7.603	0.000
QHC- PQ35 <- QHC- P	0.561	0.101	5.539	0.000
HRMP – TWQ15 <- HRMP-TW	0.551	0.074	7.444	0.000
QHC- PQ30 <- QHC- P	0.540	0.098	5.541	0.000
HRMP – TWQ13 <- HRMP-TW	0.540	0.072	7.477	0.000
QHC- SQ25 <- QHC- S	0.539	0.081	6.650	0.000
HRMP – RCQ10 <- HRMP –RC	0.530	0.062	8.611	0.000
HRMP-RWQ2 <- HRMP- RW	0.525	0.233	2.257	0.024
QHC- SQ27 <- QHC- S	0.525	0.110	4.755	0.000

QHC- PQ32 <- QHC- P	0.480	0.087	5.520	0.000
QHC – OQ38 <- QHC- O	0.463	0.108	4.295	0.000
QHC- SQ23 <- QHC- S	0.463	0.091	5.069	0.000
QHC- PQ29 <- QHC- P	0.382	0.132	2.891	0.004
HRMP-RWQ1 <- HRMP- RW	-0.057	0.359	0.160	0.873
HRMP-RWQ4 <- HRMP- RW	-0.061	0.211	0.290	0.772
QHC- PQ28 <- QHC- P	-0.094	0.128	0.735	0.462

As seen from Table 4. 1, 32 of the measured variables out of 39 have outer loadings >0.5 representing 82%. The outer loadings <0.5 are three for QHC-P (Q28, Q29 & Q32), one for QHC-S (Q23), one for QHC-O (Q38) and two for HRMP-RW (Q1 & Q4). Again, the p-value for Q1, Q4 and Q28 are >0.05, hence these loadings are not statistically significant. Despite the low loadings below 0.5, these measured variables have been retained to provide justification for the discussions of aspects of the constructs measured.

Internal Consistency Reliability

Subsequent phase in reflective measurement model is the internal consistency reliability assessment implemented on the sets of data with the use of composite reliability check as was described in the literature (Joreskog, 1971). Composite reliability is commonly utilized because it produces higher values compared to Cronbach's alpha and, Cronbach alpha assumes the entire indicator loadings are similar (Hair et al., 2021). Composite reliability check is particularly suitable for exploratory studies and reliability values ranging from 0.6 to 0.7 are considered acceptable (Hair et al., 2021). Thus, composite reliability check was assessed for only model 2 (Table 4. 2), because all the hypotheses studied in this work are derived from the theoretical construct in model 2. The values of reliability are highly significant (>0. 06) for recruitment at 0.79 and for training and development at 0.80, demonstrating the reliability of the reflective measurement models. Similarly, the values were quite significant in all except reward system, which is less than 0.06. Composite reliability, also known as the omega

coefficient, gauges the reliability of a composite scale comprising multiple items or sub-scales designed to assess a single underlying concept.

Table 4. 2

Composite reliability with 6 out of 7 values > 0.6

Measured Construct	Composite reliability (rho_c)
HRMP- RC	0.793
HRMP- RW	0.461
HRMP- T&D	0.809
HRMP- TW	0.720
QHC –O	0.714
QHC- P	0.716
QHC- S	0.782

In Smart PLS 4 software adopted in the simulation for this SEM, construct reliability and validity output provide two measures: omega-a (rho a) and omega-c (rho c). Omega-a, assesses the reliability of the composite scale when all elements are considered as a single scale. The calculation is by adding extracted average variance (AVE) and the squared correlations between items. Omega-a is suitable when all items measure the same construct without indicating different facets. On the other hand, omega-c measures the reliability of the composite scale when components are perceived as distinct scales as in this study. Below is a discussion on each measured construct composite reliability.

HRMP – RC (Recruitment)

A composite reliability score of 0.793 for HRMP's recruitment system indicates a reasonably strong internal consistency among the system's components. A score above 0.7 generally indicates an acceptable level of reliability thus, this reliability measure suggested that the system reliably and consistently assesses and measures recruitment-related variables.

HRMP – RW (Reward System)

The study shows a composite reliability score of 0.461 for HRMP's reward system denoting a comparatively low level of internal consistency among the other components. This suggested suboptimal reliability of the reward system in dependably measuring and assessing reward-related variables. A score below 0.5 indicates a limited ability to consistently capture and evaluate reward-related factors. Despite, low score of 0.461, the items were used and the justification was based on certain factors that can be attributed to cultural issues, participants' age and years of experience. Although, cultural impact of reward system was not evaluated in this study but studies recognized the cultural challenges of reward system within the work environment (Adamovic, 2023; Caprar et al, 2022). Similarly, (Olukayode et al, 2021) recognized reward system challenges in Nigeria, which were associated to poor, recompense practices. In addition, the potential influence of reward system related to age and years of experience of the participants will be further explained in this section

HRMP – TW (Teamwork)

Human resource management practices teamwork has a composite reliability score of 0.720 suggesting an internal consistency and reliability in assessing team-related competencies within the HRMP framework. The value is within the conventional threshold of 0.70, and indicates an acceptable level of reliability implying the measurement tools for teamwork exhibit reasonable consistency.

HRMP- T&D (Training and Development)

The composite reliability of 0.809 for training and development of HRMP indicated a high internal consistency level and measurement accuracy on assessment tools used for the training program. This value suggests that the constructs measured are reliable and consistent. A composite reliability of 0.809 exceeds the commonly accepted threshold of 0.70, demonstrating robust and dependable measurement. This reliability measure instils confidence in the validity of the training and development program, indicating that the assessment tools

used are consistent and precise in evaluating the intended competencies. Organizations can rely on these measures to make informed decisions about the effectiveness of HRMP training initiatives, ultimately contributing to the enhancement of HR professionals' capabilities within the workforce.

QHC –S (Structure)

The composite reliability score of 0.782 for the structure of Quality Healthcare (QHC) indicates a strong internal consistency in measuring the organizational framework. This value surpasses the commonly accepted threshold of 0.70, signifying a reliable and consistent assessment of the structural components within the healthcare system. The score instills confidence in the accuracy of measurements related to organizational structure, suggesting that the assessment tools effectively capture key elements. This information is valuable for healthcare administrators, allowing them to rely on the assessments to make informed decisions regarding organizational structure, ensuring a stable and effective framework for delivering quality healthcare services.

QHC – P (Process)

The composite reliability of 0.716 for the process aspect of quality healthcare indicates an acceptable level of internal consistency in evaluating the procedural elements within the health system. This score proposes reasonable reliability in the assessment tools for measuring healthcare processes. However, despite some variability, the measurements are consistent enough to provide meaningful insights into the efficiency and effectiveness of healthcare processes within the studied framework. Organizations can use this information to identify areas for improvement in healthcare processes, recognizing the reliability of the existing assessment tools.

QHC- O (Outcome)

The composite reliability score of 0.714 for the outcomes aspect of quality healthcare specifies a reasonably reliable measurement and impact of healthcare services. This score suggest an acceptable level of internal consistency in the assessment tools for evaluating healthcare outcomes within quality healthcare context. It indicates that, the measurements are consistent enough to provide meaningful insights into the efficiency and accomplishment of interventions and services employed in care. Organizations can use this information to weigh the impact of their healthcare delivery on patient outcomes, health care quality, and overall health improvements. Largely, the composite reliability score of 0.714 instils confidence in the ability of the assessment tools to reliably capture and measure the outcomes of care practices within the healthcare background.

Discriminant Validity

The range of dissimilarity that exist between various construct in the structural model is explained by the heterotrait-monotrait ratio (HTMT). Recent studies highlighted that the traditional metric suggested in 1981 by Fornell and Larcker are not fit for assessing this validity and should be avoided (Hair et al, 2021). Because, in many instances it does not consistently recognize discriminant validity complications (Radomir & Moisescu, 2019). However, Rasoolimanesh (2022) suggested a HTMT value lower than 0.85 or 0.9 in assessing of discriminant validity. The Fornell-Larcker criterion assesses discriminant validity by determining the square root of the average variance extracted (AVE) for each construct and then contrasting it with the associations between that construct and others in the model. The AVE represents the average of the squared factor loadings for the indicators of the construct. If the square root of the AVE exceeds the correlation with any other construct, it implies that discriminant validity is established (Rasoolimanesh, 2022). Consequently, Henseler et al. (2015) advocated for the heterotrait-monotrait ratio as a more dependable metric for assessing discriminant validity. This approach includes comparing associations and is computed as the

average item relationships across constructs relative to the average correlations for items measuring the same construct (Hair et al., 2019). Henseler et al. (2015) suggested that a HTMT value below 0.9 indicates no concern regarding discriminant validity, as indicated in Table 4.4 of their study.

Table 4. 3

Discriminant validity values < 0.85 or 0.9

Construct Intercorrelations	Heterotrait-monotrait ratio (HTMT)
HRMP-RW <-> HRMP- RC	0.354
HRMP-T&D <-> HRMP- RC	0.575
HRMP-T&D <-> HRMP- RW	0.288
HRMP-TW <-> HRMP- RC	0.513
HRMP-TW <-> HRMP- RW	0.401
HRMP-TW <-> HRMP-T&D	0.509
QHC-O <-> HRMP- RC	0.355
QHC-O <-> HRMP- RW	0.463
QHC-O <-> HRMP- T&D	0.320
QHC-O <-> HRMP -TW	0.753
QHC-P <-> HRMP- RC	0.478
QHC-P <-> HRMP- RW	0.443
QHC-P <-> HRMP-T&D	0.429
QHC-P <-> HRMP-TW	0.478
QHC-P <-> QHC- O	0.671
QHC-S <-> HRMP- RC	0.384
QHC-S <-> HRMP- RW	0.406
QHC-S <-> HRMP-T&D	0.293
QHC-S <-> HRMP- TW	0.351
QHC-S <-> QHC- O	0.492
QHC-S <-> QHC- P	0.768

Conclusions on Reflective Measurement Models

The evaluation of the reflective measurement models demonstrates their validity and appropriateness for the study. A more lenient composite reliability metric was employed instead of Cronbach alpha. As depicted in Table 4.2, 32 out of 39 measured variables have outer loadings >0.5 , representing 82%. The assessment of composite reliability was focused solely on model 2 (Table 4.3) because the hypotheses explored in this study were derived from the theoretical construct in model 2. Composite reliability, referred to as the omega coefficient, assessed the reliability of the composite scale which, composed of multiple items or sub-scales designed to measure a single underlying concept. Table 4.3 shows composite reliability values, with 6 out of 7 values exceeding 0.6. As indicated by Henseler et al. (2015), a HTMT value below 0.9 suggests no issues with discriminant validity, as shown in Table 4.4 from the results of this study. The results from the assessments of validity and reliability for reflective model indicate that model 2, which was used to investigate the study's hypotheses, is valid.

Assessment of the Structural Model

Following the satisfactory reflective measurement model an assessment of the structural model suggested in PLS – SEM becomes essential. This assessment concentrates on Model 1, which is a direct measure of the influence of HRMP on QHC. The evaluation standard employed in this study encompass the coefficient of determination (R-squared) as well as the statistical significance and relevance of the path coefficients values. The HTMT value for the outcome (QHC) in model 1 is 0.617, which is also < 0.9 and therefore valid.

Coefficient of determination R- Squared (R^2)

The R-squared (R^2) criterion, referred to as the predictive capability of the dataset represents the percentage of variability in an outcome variable that can be accounted for by the predictor variable in a predictive model grounded on causal relationships (Chicco et al., 2021). R^2 varies between 0 and 1, where high scores indicate a stronger explanatory influence. Scholars often categorizes R^2 values as substantial (0.75), moderate (0.50), and weak (0.25),

reflecting the measurement's explanatory strength (Purwanto & Sudargini, 2021). As suggested in **Error! Reference source not found.**, when the R-squared (R^2) value of 0.21 representing the influence of Human Resource Management Practices (HRMP) on Quality of Healthcare (QHC) is less than 0.25, indicating a weak influence, several implications arise. Primarily, it suggests that HRMP explains only a small fraction (less than 25%) of the variability observed in the quality of healthcare outcomes.

In practical terms, this weak influence implies that other factors beyond HRMP, such as organizational culture, resource allocation, or external factors, significantly contribute to the quality of healthcare delivery. For researchers and practitioners, it underscores the need to explore and address these additional factors comprehensively to enhance healthcare quality effectively. This insight from the study provides the ability of using this approach in providing explanation into other factors contributing to QHC. A positive aspect of finding a weak influence of Human Resource Management Practices (HRMP) on Quality of Healthcare (QHC) ($R^2 < 0.25$) is the opportunity it presents for further investigation and improvement. This result highlights areas within HRMP that might need enhancement or modification to more substantially impact healthcare quality. By identifying the specific aspects of HRMP that are less influential, healthcare organizations can target these areas for improvement initiatives, leading to potentially significant enhancements in the quality of healthcare services. Additionally, this result encourages researchers and practitioners to delve deeper into the complex interplay of factors affecting healthcare quality, promoting a more nuanced understanding of the dynamics involved and guiding future strategies for improvement.

Statistical Significance and Relevance of the Path Coefficients

Bootstrap resampling was conducted using 5000 subsamples of models 1 and 2. In the SEM framework of SmartPLS, the path coefficients signify the immediate impacts of the interconnected relationships. As detailed in 4.5, the direct effect in model 1 statistically

significant, above the threshold of $t(\alpha/2) \geq 1.690$. For model 2, only 4 out of the 12 relationships are statistically significant at $t(\alpha/2) \geq 1.690$.

Table 4. 4

Path coefficients of latent variables for models 1 and 2

Model	Relationship	Path Coefficient	Standard deviation	t statistics	p values
Model 1	HRMP -> QHC	0.506	0.044	10.377	0.000
Model 2	HRMP-RC -> QHC- O	0.095	0.073	1.482	0.138
	HRMP-RC -> QHC- P	0.207	0.075	2.845	0.004
	HRMP-RC -> QHC- S	0.158	0.098	1.528	0.127
	HRMP-RW -> QHC- O	-0.118	0.144	1.136	0.256
	HRMP-RW -> QHC- P	0.058	0.109	0.349	0.727
	HRMP-RW -> QHC- S	0.187	0.111	1.962	0.050
	HRMP-T&D -> QHC-O	0.046	0.075	0.401	0.689
	HRMP-T&D -> QHC- P	0.192	0.073	2.398	0.017
	HRMP-T&D -> QHC-S	0.103	0.092	1.057	0.291
	HRMP-TW -> QHC- O	0.334	0.059	5.607	0.000
	HRMP-TW -> QHC- P	0.137	0.083	1.625	0.104
	HRMP-TW -> QHC- S	0.152	0.086	1.778	0.075

Conclusions on Structural Model Assessment

This study evaluates using R-squared, statistical significance, and path coefficient relevance. An R-squared value of 0.21 (representing HRMP's impact on QHC) below 0.25 implies a weak influence, indicating HRMP explains less than 25% of healthcare quality variability. In model 1, all direct effects meet the significant threshold ($t(\alpha/2) \geq 1.690$), while in model 2, only 4 out of 12 relationships are significant. Despite this, the structural equation models are valid, providing valuable insights into HRMP factors affecting QHC for decision-making.

Results

Result reporting is a critical phase in the research process and follows description of research methods, data collection and statistical techniques provided. Specifically, it gives a detailed elucidation of data collection and analyzes method implemented. It equally entails presenting and communicating the findings of a study in a scientific manner to the public. Effective reporting is crucial for facilitating critical evaluation by peers, reproducibility, transparency and the advancement of knowledge. It also helps to safeguard the study integrity and credibility. The outcomes of the research are presented in a distinct and structured way by means of tables, figures, and graphs as appropriate for data visualization. Relevant statistical analyses and the significance of the findings were discussed. Result reporting focused only on presentation of raw data without interpretation or discussion of the results. Results was later interpreted from the perspective of the study question/ hypotheses and current literatures. In addition, implications and significance of findings was discussed in addition to the limitations and potential sources of error or bias. All sources used in this study was cited using standardized APA citation style with consideration to ethical principles.

Descriptive Analysis

Human Resource Management (HRM) practices encompass crucial tasks such as skill enhancement, capacity building, and training to enhance staff abilities, ensuring top-notch performance and high-quality service delivery (Aranha & Venkateswaran, 2020; Zaiter et al., 2021). HRM holds a pivotal role in enhancing an organization's relevance and competitiveness. This research concentrates on government healthcare provider, aiming to provide practical insights into applying HRM practices effectively within the Nigerian healthcare sector. The inclusion criteria in this research are healthcare workers such as doctors, nurses, pharmacists, laboratory scientists to mention a few. The subjects included are aged 18 and above, employed in Lagos state tertiary hospital, and possess at least one year of experience. Conversely, those excluded from participation are individuals who lack medical expertise, are not employed in

Lagos state tertiary health institution and have not worked in the governmental health sector for a year or more. The descriptive results from the outcome of this study are discussed further in the subsections that follows.

Data Description

The study gathered demographic data from selected participants representing various medical fields within the hospital with good survey instrument return of about 357 completed forms comprising of manual and online data. The participants comprise of staff from different departments. However, Bachelor of science degree holders has the highest number of respondents consisting of 120 individuals, followed by nursing with 71 individuals and higher national diploma (HND) has the lowest number with 4 participants.

The analysis of the demographical data is presented in **Figures 4.4** through **4.8**, as follows.

Figure 4. 4

Participants' gender: Female 235 and Male 122

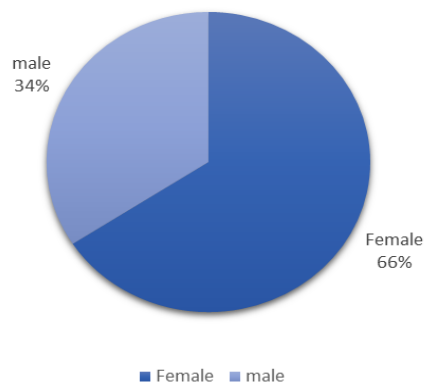
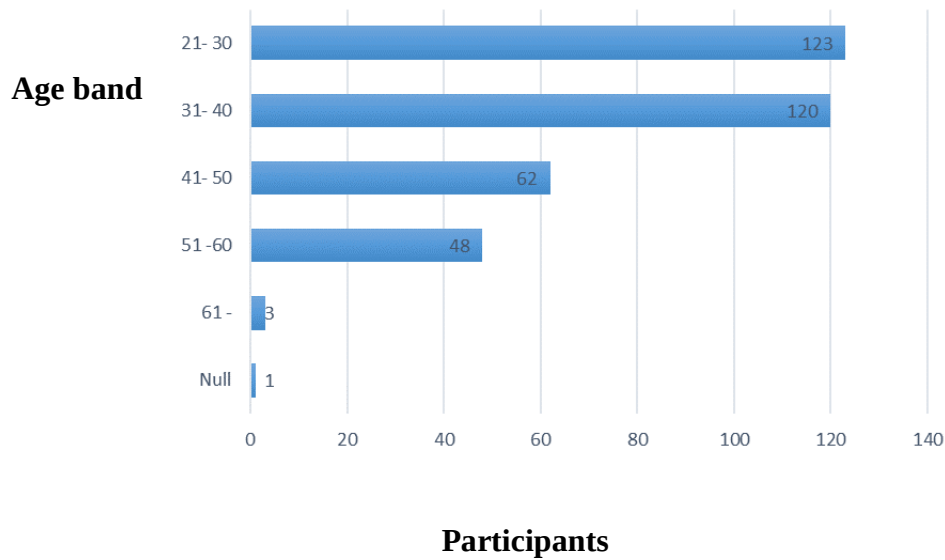
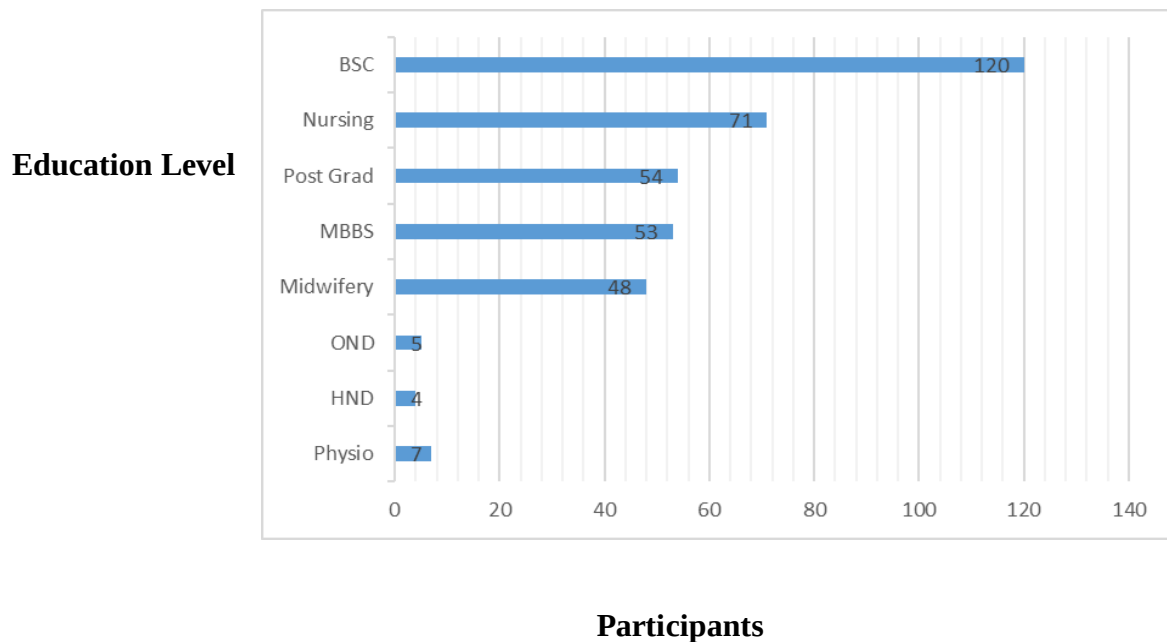


Figure 4. 5*Participants' age band*

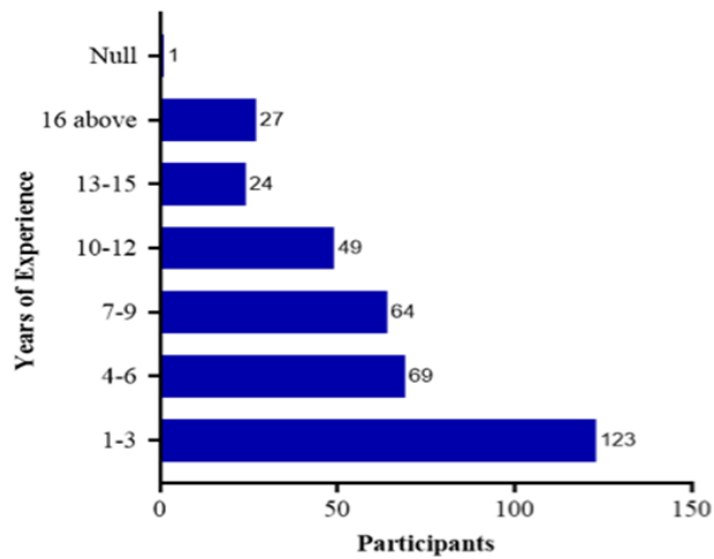
Figures 4.4 and **4.5** revealed the gender distribution among the participants and it showed a large number of females with 235 respondents (66%) almost double of males at 122 (34%). Regarding age, the participants were grouped as follows: 21-30 years (123 individuals) at 34.45%, 31-40 years (120 individuals) at 33.61%, 41-50 years (62 individuals) at 17.36%, 51-60 years (48 individuals) at 13.44% and 61 years and above (3 individuals) at 0.84%. There was also one participant with unspecified age.

Figure 4. 6*Participants' educational level*

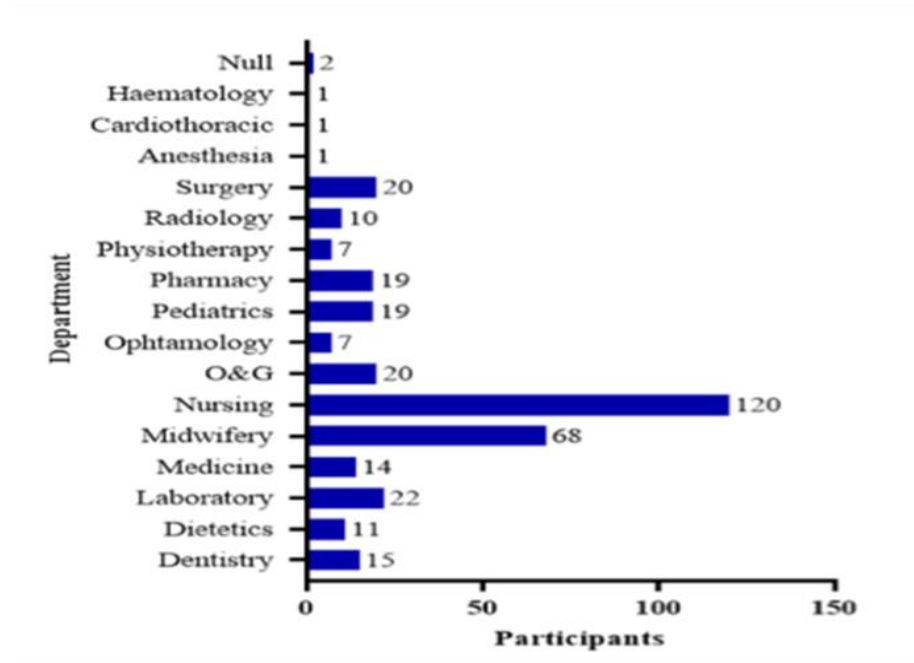
Regarding the educational background from figure 4.6, the participants held diverse qualifications. The educational levels included Higher National Diploma (HND) comprised of 4 participants, accounting for 1.10% of the total participants. Bachelor Degree in Science (BSc) has 120 participants at 33.15%. Bachelor of Medicine and Bachelor of Surgery (MBBS) has 53 participants (14.64%), Midwifery has 48 participants (13.26%), Nursing has 71 participants (19.61%), Physiotherapy has 7 participants (1.93%), Postgraduate degrees has 54 participants (14.92%), and National Diploma (ND) has 5 participants (1.38%).

Figure 4. 7

Participants' years of experience



From figure 4.7, the participants also varied in terms of years of experience in their respective fields. The distribution of experience was as follows: 1-3 years of experience (123 individuals), 4-6 years (69 individuals), 7-9 years (64 individuals), 10-12 years (49 individuals), 13-15 years (24 individuals), and 16 or more years of experience (27 individuals). There was one participant with unspecified years of experience.

Figure 4. 8*Participants' medical department*

The diverse demographic dataset as indicated in figure 4.8 represented a wide range of healthcare professionals, allowing for a wide-ranging analysis of the study's aims and outcomes across different specialities, age groups, educational backgrounds, and years of experience within the medical field.

Summary of Demographics

The extensive demographic profile of the participants in the study, including variations in age, gender, educational background, and years of experience, can have several implications for Quality Healthcare (QHC). Although the intent of the study was not to establish demographic factors affecting QHC service delivery but the demographics were considered to provide background information on the category of research participants.

Diverse Staff and Skill Mix: The mix of participants from different medical fields with different specialities, such as midwifery, paediatrics, nursing, physiotherapy to mention a few suggest a varied skill set and right skill mix within the team as well as the interdisciplinary

nature of healthcare. This diversification can contribute to a comprehensive approach to patient care, lower the likelihood of duplicate assessments, reduce errors, mortality and promotes timely response to patient care needs thereby covering a wide range of medical expertise that is a vital element in quality service delivery (Kushemererwa et al., 2020; Tamburello, 2023).

Gender Distribution: The gender representation with slightly more females is in line with World Health Organization (WHO, 2019) report, which highlighted that women consist of about 70 percent of the health care workforce. In this research, the female workforce constitutes 66%, while the male workforce comprises 34%. This is a positive reflection of more inclusive and representative workforce, because globally women comprise the bulk of healthcare service workers. Gender balance can enhance empathy and understanding in patient interactions, leading to improved patient satisfaction and potentially better healthcare outcomes. Rushitha et al. (2023) highlighted a significant high empathy scores in females than males in their study that evaluated empathy level among health professionals.

Age and Experience: The distribution across different age groups and years of experience signifies a blend of youthful energy, seasoned expertise, and institutional knowledge. This diversity can promote a healthy exchange of ideas, skills and best practices among team members, fostering a dynamic learning environment. In addition, this is crucial especially in this era of global shortage of healthcare professionals associated with migration and aging population of health workforce (Rinsky-Halivni et al., 2022). The young workforces age range are within 21-30 and 31-40, the former consists of 123 individuals and the later includes 120 participants respectively, representing more than half of the healthcare workers, with a combined percentage of 68.06%.

Educational Background: The participants' different educational qualifications, extending from HND to Postgraduate degrees, indicate a variety of theoretical knowledge and technical skills. These diverse qualifications can immensely contribute to multidisciplinary

collaboration and a holistic approach to patient care, potentially enhancing the total excellence and effectiveness of care services. According to the WHO report, to increase the number of health workforce is important but not adequate, rather ensuring improved educational programs that focus on effective knowledge and skill transfer that will yield multidisciplinary teams is a global pressing and vital need (Joubert & Reid, 2023).

Potential Challenges and Solutions

Although diversity is a strength by promoting a positive and inclusive work environment, thereby help to build healthy relationship between the team of professionals and the various patient populace. First, it can also present challenges related to miscommunication, lack of coordination and misunderstanding amongst team due to different cultural backgrounds. Thus, ongoing training on effective communication and the impact of culture in creating positive work environment will be ideal. Second, differences in educational backgrounds and years of experience might require personalized training programs and well – established protocols to ensure a standardized level of care and to maintain consistency in service delivery.

In addition, the mix of educational levels and varied experience highlights the benefits of continual professional development. Therefore, healthcare professionals from different educational backgrounds may need continuing training to be current with the modern advancements in medicine and evidence-based practices, to safeguard quality care delivery and up-to-date healthcare services.

Thus, various demographic composition of the participants can positively influence quality of healthcare by promoting an interdisciplinary approach, encouraging inclusivity, and boosting continuous learning. However, effective management strategies, clear communication channels, and modified training programs are essential to exploit the benefits of this multiplicity and to address any possible associated challenges.

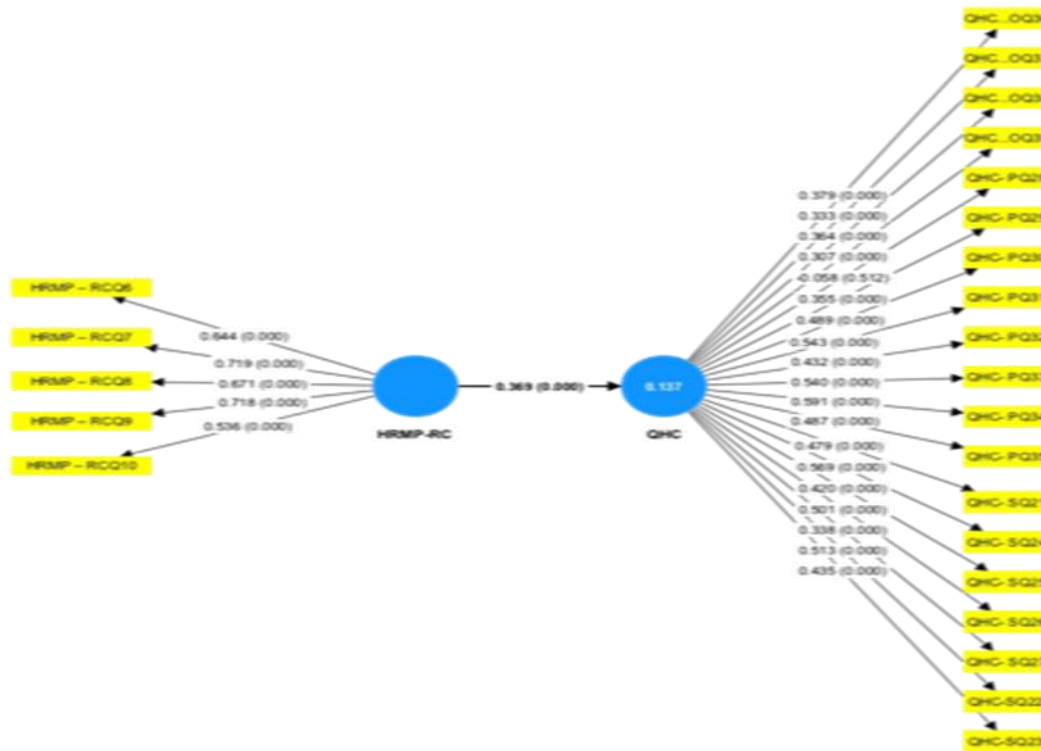
Hypotheses Testing

The beta coefficient, also known as path-coefficient, signifies the extent of change in the outcome variable for each 1-unit alteration in the predictor variable. The t-test determines if the beta coefficient significantly differs from zero. If the t-value is not significant, indicating a non-significant beta coefficient, the variable does not predict the outcome significantly. In cases of a significant beta coefficient, the sign is crucial: a positive beta suggests the outcome variable increases by the beta value for every 1-unit rise in the predictor, while a negative beta implies the outcome variable decreases by the beta value for every 1-unit increase in the predictor. Concerns about the $p \leq 0.05$ threshold have led to adopting multiple criteria for hypothesis acceptance. To prevent Type I errors (incorrectly rejecting the null hypothesis) indicated by false positives, the significance level, often set at $\alpha = 0.05$, requires that the p-value be below this threshold. Similarly, to mitigate Type II errors (failing to reject a false null hypothesis), denoted by false negatives, a post hoc statistical power of 0.8 or higher ($1 - \beta \geq 0.8$) is recommended.

Moreover, it is crucial that the estimated values of the Pearson correlation, coefficient of determination, and path coefficient for each hypothesis lie within the 95% confidence interval (CI). This requirement applies alongside the need for the t-statistic value to exceed the critical threshold, usually set at 1.690 for two-tailed CIs ($t(\alpha = 0.05)/2 \geq 1.690$), at the same time considering the appropriate amounts of freedom ($n-1$). The hypotheses illustrated in model 2 presented earlier and each HRMP construct and QHC are evaluated based on the above criteria. The discussions that follow will evaluate each hypothesis in turn.

Figure 4.9

Hypothesis 1 (H1): There is a significant relationship between HRMP recruitment and quality healthcare (QHC)



The result of hypothesis H1, that revealed a significant relationship between HRMP and quality healthcare (QHC) indicate a positive and highly significant relationship between the recruitment dimension of HRMP and QHC, as evidenced by an R-squared value of 13.7%. Consequently, the alternative hypothesis asserting that HRMP-RC is positively and significantly associated with QHC is accepted. This suggested that all survey questions used to measure recruitment aspects such as the impact of recruitment processes on staff selection, fairness in recruitment without biases, the influence of information and performance expectations on service quality are consistent. The efficiency of recruitment in securing competent staff, and the role of on boarding in integrating new staff for quality service are meaningful contributors to the processes, outcomes, and structure of QHC.

Hypothesis H1

The result for Hypothesis H1a, which states that there is a significant relationship between recruitment (HRMP-RC) and quality healthcare structure (QHC-S), indicates that the path coefficient, representing the strength and direction of this relationship, is 0.158. The standard deviation, a measure of the variability of the data, is 0.098. The t-statistic, used to

assess the significance of the relationship, is 1.528. The associated p-value, which indicates the probability of observing this result if there is no actual relationship between recruitment and quality healthcare structure, is 0.127. In this case, since the p-value (0.127) is greater than the commonly used threshold of 0.05, the result suggests that the relationship between recruitment and quality healthcare structure is not statistically significant at the 0.05 significance level, hence, the decision is “**reject H1a.**” Nevertheless, it is vital to recognize the relationship is still worth further consideration and could be explored in the context of a larger sample or with additional variables to obtain a more comprehensive understanding.

Hypothesis H 1

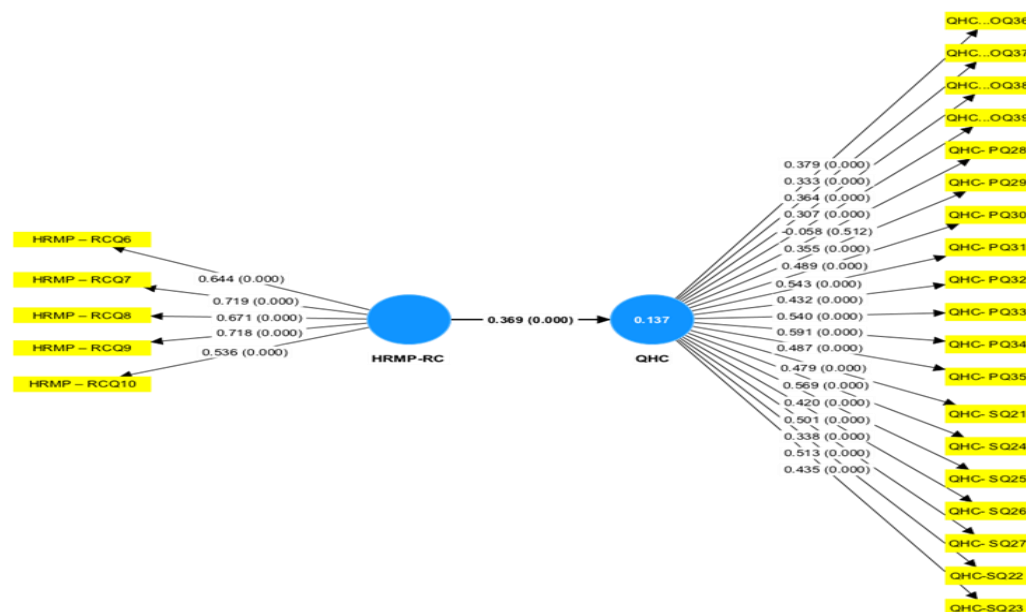
The result for Hypothesis H1b, which posits a significant relationship between recruitment (HRMP-RC) and quality healthcare processes (QHC-P), reveals a path coefficient of 0.207. This coefficient represents the strength and direction of the relationship: for every unit change in recruitment, there is a 0.207 unit change in quality healthcare processes. The standard deviation, indicating the variability in the data, is 0.075. The t-statistic, used to assess the significance of the relationship, is 2.845, suggesting that the relationship between recruitment and quality healthcare processes is statistically significant. Furthermore, the associated p-value is 0.004, which is less than the conventional threshold of 0.05. This low p-value indicates that the observed relationship is highly unlikely to occur by random chance alone. Therefore, the result provides strong evidence to support the hypothesis that there is a significant and positive relationship between recruitment efforts and the quality of healthcare processes, and the decision is “**accept H1b.**” In practical terms, this means that enhancements in recruitment techniques are related to enhanced quality healthcare processes within the studied context.

Hypothesis H1

The result for Hypothesis H1c, investigating the relationship between recruitment (HRMP-RC) and quality healthcare outcomes (QHC-O), reveals a path coefficient of 0.095. This coefficient signifies that for every unit change in recruitment, there is a 0.095 unit change in quality healthcare outcomes. The standard deviation, indicating data variability, is 0.073. The associated t-statistic is 1.482, and the p-value is 0.138. In this context, the p-value (0.138) is greater than the conventional threshold of 0.05. This suggests that the observed relationship between recruitment and healthcare outcomes is not statistically significant at the 0.05 significance level. In other words, data does not provide strong and sufficient proof to support the claim that there is a significant relationship between recruitment efforts and quality of healthcare outcomes in this study, and the decision is **“reject H1c.”** While the relationship is not statistically significant in this specific analysis, it is important to infer these findings on the study's limitations and consider other factors or a larger dataset for a more comprehensive understanding.

Figure 4. 10

Hypothesis 2 (H2): There is a significant relationship between HRMP reward system and quality healthcare (QHC).



The study found that the reward system of HRMP did not emerge as a significant factor influencing Quality of Healthcare (QHC) despite having an R-squared value of **16.6%**. However, it was noted that the specific aspect of the reward system related to the statement *"Fairly good reward system can make me stay on the job"* showed significance at a *p*-value of 0.05. Consequently, the study rejects alternative hypothesis suggesting a positive and substantial association existing between HRMP reward system and QHC. The Null hypothesis had suggested there is no significant relationship between HRMP-RW and QHC, and therefore accepted in this study. The lack of significance for the mentioned survey questions on the reward system in contributing to the relationship between HRMP (Human Resource Management Practices) and QHC (Quality of Healthcare) across process, structure, and outcome dimensions could be attributed to several possible rationales that will be discussed later.

Hypothesis H2

The result for Hypothesis H2a, examining the relationship between the reward system (HRMP-RW) and quality healthcare structure (QHC-S), shows a path coefficient of 0.187. This coefficient indicates that for every unit change in the reward system, there is a 0.187 unit change in quality healthcare structure. The standard deviation, which measures data variability, is 0.111. The associated *t*-statistic is 1.962, and the *p*-value is 0.050. In this context, the *p*-value (0.050) is right on the border of the conventional threshold of 0.05. This proposes that the observed relationship between the reward system and healthcare structure is marginally significant at the 0.05 significance level, and the decision is **“accept H2a.”** While the relationship is not strongly significant in this specific analysis, it is close to being significant, indicating a trend that might become more distinct with a larger sample size or under slightly different conditions. For future studies, researchers might consider exploring this relationship further with a larger dataset to determine if this trend becomes more conclusive.

Hypothesis H2

The result for Hypothesis H2b, investigating the relationship between the reward system (HRMP-RW) and quality healthcare processes (QHC-P), shows a path coefficient of 0.058. This coefficient signifies that for every unit change in the reward system, there is a 0.058 unit change in quality healthcare processes. The standard deviation, indicating data variability, is 0.109. The associated t-statistic is 0.349, and the p-value is 0.727. In this case, the p-value (0.727) is significantly higher than the conventional threshold of 0.05. This indicates that the observed relationship between the reward system and healthcare processes is not statistically significant at the 0.05 significance level. The data does not provide strong indication to support the claim that there is a significant relationship between the reward system and the quality of healthcare processes in this study, and the decision is **“reject H2b.”** Essentially, the analysis does not show a substantial connection between the reward system and the quality of healthcare processes based on the provided data.

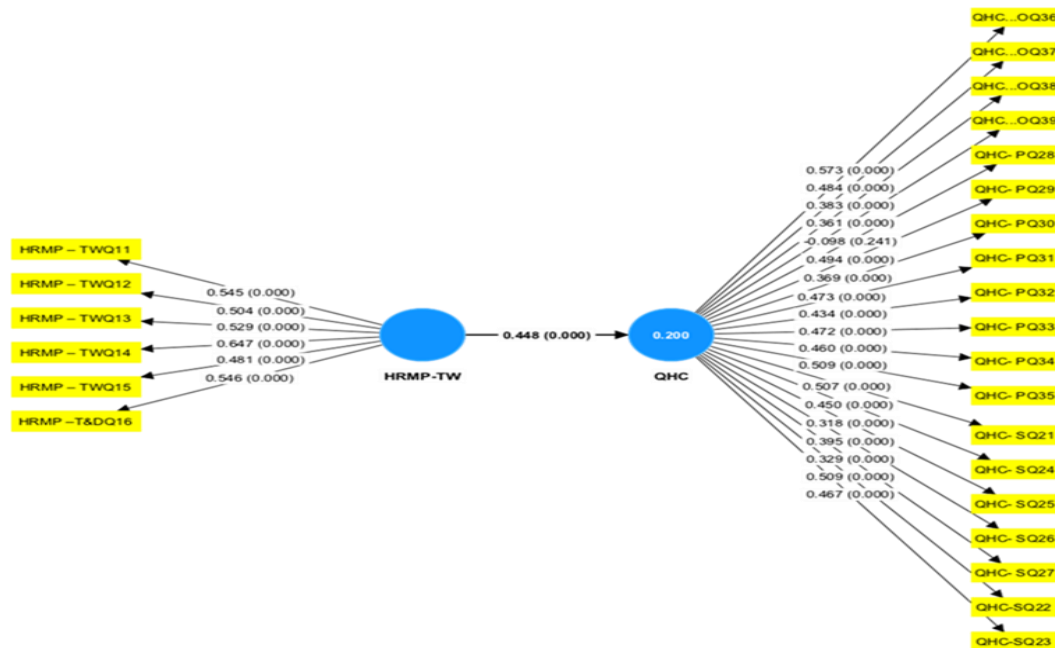
Hypothesis H2

The result for Hypothesis H2c, which investigates the relationship between the reward system (HRMP-RW) and quality healthcare outcomes (QHC-O), reveals a path coefficient of -0.118. This coefficient indicates that for every unit change in the reward system, there is a decrease of 0.118 units in quality healthcare outcomes. The standard deviation, reflecting data variability, is 0.144. The associated t-statistic is 1.136, and the p-value is 0.256. In this context, the p-value (0.256) is higher than the conventional threshold of 0.05. This suggests that the observed relationship between the reward system and healthcare outcomes is not statistically significant at the 0.05 significance level. The data does not deliver strong sufficient indication to support the claim that there is a significant relationship between the reward system and the quality of healthcare outcomes in this study, and the decision is **“reject H2c.”** Essentially, the

analysis does not demonstrate a substantial connection between the reward system and the quality of healthcare outcomes based on the provided data.

Figure 4.11

Hypothesis 3 (H3): There is a significant relationship between HRMP teamwork and quality healthcare (QHC).



The findings indicated a highly significant and positive relationship between the teamwork dimension of HRMP and Quality of Healthcare (QHC), as reflected by an R-squared value of **20%**. Consequently, the alternative hypothesis proposing a positive and significant association between HRMP-RC and QHC is accepted. This implies that the survey questions used to gauge teamwork are substantial contributors to the processes, outcomes, and structure of QHC.

Hypothesis H3

The result for Hypothesis H3a, which examines the relationship between teamwork (HRMP-TW) and quality healthcare structure (QHC-S), shows a path coefficient of 0.152. This coefficient indicates that for every unit change in teamwork, there is a 0.152 unit change in quality healthcare structure. The standard deviation, representing data variability, is 0.086. The

associated t-statistic is 1.778, and the p-value is 0.075. In this case, the p-value (0.075) is just slightly higher than the conventional threshold of 0.05. This recommends that the observed relationship between teamwork and healthcare structure is marginally not statistically significant at the 0.05 significance level, and the decision is **“reject H3a.”** However, the result is quite close to being significant, indicating a potential trend that could be more conclusive with a larger sample size or under slightly different conditions. Researchers might consider investigating this relationship further with a larger dataset to determine if this trend becomes more apparent.

Hypothesis H3

The result for Hypothesis H3b, which investigates the relationship between teamwork (HRMP-TW) and quality healthcare processes (QHC-P), indicates a path coefficient of 0.137. This coefficient suggests that for every unit change in teamwork, there is a 0.137 unit change in quality healthcare processes. The standard deviation, representing data variability, is 0.083. The associated t-statistic is 1.625, and the p-value is 0.104. In this context, the p-value (0.104) is higher than the conventional threshold of 0.05. This advises that the observed relationship between teamwork and healthcare processes is not statistically significant at the 0.05 significance level. The data does not give adequate proof to support the claim that there is a significant relationship between teamwork and the quality of healthcare processes in this study, and the decision is **“reject H3b.”** While the relationship is not statistically significant in this specific analysis, it is important to interpret these findings within the context of the study's limitations and consider additional factors or a larger dataset for a more comprehensive understanding.

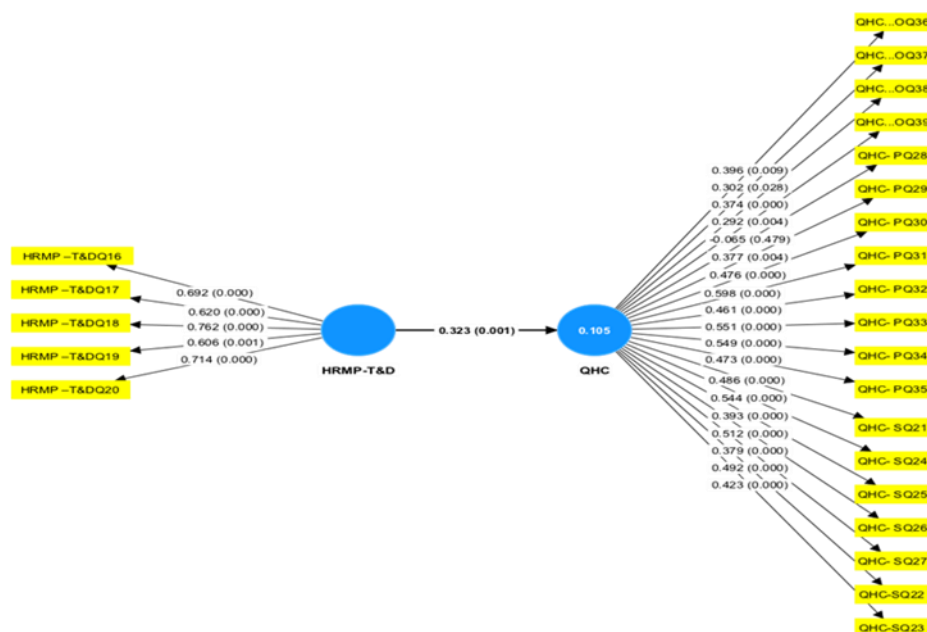
Hypothesis H3

The result for Hypothesis H3c, exploring the relationship between teamwork (HRMP-TW) and quality healthcare outcomes (QHC-O), reveals a path coefficient of 0.334. This

coefficient signifies that for every unit change in teamwork, there is a substantial 0.334 unit change in quality healthcare outcomes. The standard deviation, indicating data variability, is 0.059. The associated t-statistic is 5.607, and the p-value is incredibly low, reported as 0.000. In this case, the p-value is much lower than the conventional threshold of 0.05, indicating an extremely high level of statistical significance. A p-value of 0.000 implies that the observed relationship between teamwork and healthcare outcomes is highly significant. The path coefficient of 0.334 further emphasizes the strength and positive direction of this relationship. These results offer hearty evidence to sustain the claim that there is a significant and positive relationship between teamwork and the quality of healthcare outcomes in this study, and the decision is “**accept H3c.**” Essentially, improvements in teamwork are strongly associated with better healthcare outcomes, making it a critical factor in enhancing the quality of healthcare services provided.

Figure 4.12

Hypothesis 4 (H4): There is a significant relationship between HRMP training and development and quality healthcare (QHC).



The study's results indicate a highly significant and positive relationship between the training and development dimension of HRMP and Quality of Healthcare (QHC), as reflected by an R-squared value of 10.5%. Consequently, the alternative hypothesis positing a positive and significant association between HRMP-T&D and QHC is accepted. This suggests that the surveyed questions play a meaningful role as contributors to the processes, outcomes, and structure of QHC:

Hypothesis H4

The result for Hypothesis H4a, which investigates the relationship between training and development (HRMP-T&D) and quality healthcare structure (QHC-S), reveals a path coefficient of 0.103. This coefficient implies that for every unit change in training and development, there is a 0.103 unit change in quality healthcare structure. The standard deviation, indicating data variability, is 0.092. The associated t-statistic is 1.057, and the p-value is 0.291. In this context, the p-value (0.291) is higher than the conventional threshold of 0.05. This advocates that the observed relationship between training and development and healthcare structure is not statistically significant at the 0.05 significance level. The data does not offer strong proof to support the claim that there is a significant relationship between training and development efforts and the quality of healthcare structure in this study, and the decision is “**reject H4a.**” The result suggests that, based on this analysis, training and development programs are not significantly impacting the quality of healthcare structure in the studied context. Researchers might need to explore additional variables or consider a larger sample size to gain further insights into this relationship.

Hypothesis H4

The result for Hypothesis H4b, examining the relationship between training and development (HRMP-T&D) and quality healthcare processes (QHC-P), shows a path coefficient of 0.192. This coefficient suggests that for every unit change in training and

development, there is a 0.192 unit change in quality healthcare processes. The standard deviation, indicating data variability, is 0.073. The associated t-statistic is 2.398, and the p-value is 0.017. In this case, the p-value (0.017) is lower than the conventional threshold of 0.05, indicating that the observed relationship between training and development and healthcare processes is statistically significant at the 0.05 significance level. The t-statistic value of 2.398 further supports the significance of this relationship. Therefore, the data provides strong evidence to support the hypothesis that there is a significant and positive relationship between training and development efforts and the quality of healthcare processes in this study, and the decision is **“accept H4b.”** This means that improvements in training and development programs are associated with enhanced quality in healthcare processes within the studied context.

Hypothesis H4

The result for Hypothesis H4c, investigating the relationship between training and development (HRMP-T&D) and quality healthcare outcomes (QHC-O), reveals a path coefficient of 0.046. This coefficient indicates that for every unit change in training and development, there is a 0.046 unit change in quality healthcare outcomes. The standard deviation, reflecting data variability, is 0.075. The associated t-statistic is 0.401, and the p-value is 0.689. In this context, the p-value (0.689) is significantly higher than the conventional threshold of 0.05. This suggests that the observed relationship between training and development and healthcare outcomes is not statistically significant at the 0.05 significance level. The data does not provide strong evidence to back the claim that there is a significant relationship between training and development efforts and the quality of healthcare outcomes in this study, and the decision is **“reject H4c.”** Essentially, the analysis does not show a substantial connection between training and development programs and the quality of healthcare outcomes based on the provided data.

A table of the final state of the hypotheses developed in this study are summarised below:

Table 4. 5

Outcome of Hypotheses Testing

Hypot hesis	Relationship Investigated	Prior-Study	Post-Study	Decision
H1	HRMP RC -> QHC	There is significant relationship between human resource management practice: recruitment (HRMP-RC) and quality healthcare (QHC)	Significant	Accept
H1a	HRMP- RC -> QHC-S	There is a significant relationship between HRMP- RC and QHC- Structure (S)	Non-significant	Reject
H1b	HRMP- RC -> QHC-P	There is a significant relationship between HRMP –RC and QHC- Process (P)	Significant	Accept
H1c	HRMP- RC -> QHC-O	There is a significant relationship between HRMP –RC and QHC- Outcome (O)	Non-significant	Reject
H2	HRMP – RW -> QHC	There is significant relationship between HRMP: reward system (RW) and QHC	Non-significant	Reject
H2a	HRMP- RW -> QHC-S	There is a significant relationship between HRMP- RW and QHC- S	Significant	Accept
H2b	HRMP –RW->QHC- P	There is a significant relationship between HRMP- RW and QHC- P	Non-significant	Reject
H2c	HRMP- RW -> QHC-O	There is a significant relationship between HRMP- RW and QHC- O	Non-significant	Reject
H3	HRMP- TW -> QHC	There is a significant relationship between HRMP –teamwork (TW) and QHC.	Significant	Accept

H3a	HRMP- TW -> QHC –S	There is a significant relationship between HRMP- TW and QHC- S	Non-significant	Reject
H3b	HRMP- TW -> QHC-P	There is a significant relationship between HRMP- TW and QHC- P	Non-significant	Reject
H3c	HRMP-TW -> QHC-O	There is a significant relationship between HRMP- TW and QHC- O	Significant	Accept
H4	HRMP- T&D -> QHC	There is a significant relationship between HRMP: training and development (T&D) and QHC	Significant	Accept
H4a	HRMP-T&D -> QHC-S	There is a significant relationship between HRMP- T&D and QHC –S	Non-significant	Reject
H4b	HRMP-T&D ->QHC-P	Significant	Significant	Accept
H4c	HRMP-T&D -> QHC-O	Significant	Non-significant	Reject

Summary

The hypotheses test conducted in this research provided valued insights on the associations between various human resource management practices (HRMPs) and different aspect of healthcare quality (QHC)

Hypothesis 1 (H1) – HRMP: RC and QHC: The result revealed a significant relationship between the studied variables.

Hypothesis 2 (H1a) – HRMP: RC and QHC- S: The analysis failed to show a statistically significant relationship between recruitment efforts and healthcare structure, suggesting that recruitment practices alone may not substantially impact the structural aspects of healthcare delivery.

Hypothesis 3 (H1b) – HRMP: RC and QHC- P: Contrarily, the relationship between recruitment and healthcare processes was statistically significant, indicating that recruitment strategies significantly influence the operational processes within healthcare organizations.

Hypothesis 4 (H1c) – HRMP: RC and QHC- O: The data did not support a significant link between recruitment and healthcare outcomes, implying that recruitment efforts may not be linked with the quality of healthcare outcomes.

Hypothesis 5 (H2) - HRMP: RW and QHC: The finding show non- significant relationship between the variables.

Hypothesis 6 (H2a) – HRMP: RW and QHC- S: The relationship between the reward system and healthcare structure was marginally significant, hinting at a potential connection that might become clearer with a larger sample or additional factors considered.

Hypothesis 7 (H2b) – HRMP: RW and QHC- P: No significant relationship was found between the reward system and healthcare processes, suggesting that the reward system might not impact the operational aspects of healthcare delivery.

Hypothesis 8 (H2c) – HRMP: RW and QHC- O: The analysis did not establish a significant relationship between the reward system and healthcare outcomes, indicating that the reward system might not be a decisive factor in determining the total quality of healthcare outcomes.

Hypothesis 9 (H3) - HRMP: TW and QHC: There is a strong positive relationship between teamwork and quality healthcare

Hypothesis 10 (H3a) – HRMP: TW and QHC- S: The relationship between teamwork and healthcare structure was marginally not statistically significant, suggesting a potential trend that could be explored further with a larger dataset or under different conditions.

Hypothesis 11 (H3b) – HRMP: TW and QHC- P: The data did not support a significant relationship between teamwork and healthcare processes, indicating that teamwork efforts might not substantially influence the operational processes within healthcare organizations.

Hypothesis 12 (H3c) – HRMP: TW and QHC- O: A significant and positive relationship was found between teamwork and healthcare outcomes, emphasizing the importance of collaborative efforts in improving the quality of healthcare outcomes.

Hypothesis 13 (H4) - HRMP: T &D and QHC: The result demonstrated a significant relationship between the variables of study.

Hypothesis 14 (H4a) – HRMP: T&D and QHC -S: Training and development efforts were not found to have a statistically significant impact on healthcare structure, indicating that training programs alone might not significantly influence the structural aspects of healthcare delivery.

Hypothesis 15 (H4b) – HRMP: T&D and QHC- P: There was a significant and positive relationship between training and development efforts and healthcare processes, highlighting the importance of training programs in enhancing the operational aspects of healthcare delivery.

Hypothesis 16 (H4c) – HRMP: T&D and QHC- O: The analysis did not establish a significant relationship between training and development efforts and healthcare outcomes, suggesting that training programs might not be directly connected with the quality of healthcare outcomes. Essentially, this study generated sixteen hypotheses that was tested using suitable analytical technique and the outcome yielded seven statistically significant hypotheses which was accepted and nine rejected hypotheses as non- significant. Therefore, a detailed evaluation of the findings on the sixteen hypotheses is presented below to infer their influences on hospital management and policy makers.

Evaluation of Findings

The findings were assessed from the viewpoint of healthcare management and policy development. Understanding of the framework and context in which findings were interpreted provide a better grip of the relevance and implications of the results. The study centres on human resource management practices (HRMPs) and quality healthcare (QHC). The findings

were discussed with an elaborate elucidation of each constructs and the sub- constructs consisting of reward system, recruitment, teamwork, training & development and structure, process and outcome respectively. The aim is to provide insight on how individual latent variable influences quality healthcare through the relevant measured variables. The discussion hitherto revealed that the models and relationships evaluated proffered sufficient evidence to propose there is a correlation between the constructs of study. This study is primarily valuable to human resource management, administrators, policymakers, and other stakeholders in the healthcare sectors.

Therefore, applicability of the research is to the relevant decision makers related to hospital management and policy formulation. The study's outcomes are intended to offer guidance for real-world implementation, thus are actionable information that can inform decisions and policies in healthcare. The aim is not just to contribute to theoretical knowledge but also to provide practical insights that can influence how health institutions are managed and how policies are constructed to enhance quality care delivery. Hence, the findings suggest that the research is part of a broader effort to inform and potentially shape policies that can influence the functioning and quality of care within health institutions.

Human resource management practices (HRMPs) and Quality Healthcare (QHC)

Herzberg's two- factor theory of motivation and the Donabedian model of quality care were adopted for this study. The outcome of the data generated through SEM simulation was discussed to determine the extent of correlation between HRMP and QHC, in addition to ascertain which HRMPs that have a higher influence on QHC and which component of QHC were affected. Emphasis was placed on defining the level of significance and the percentage of contribution of each sub- construct to quality care delivery, the cumulative contribution of HRMPs to quality healthcare and the element of quality of care influenced. The result of the study will potentially guide policy focusing on the significance of the three selected HRMPs

(recruitment, teamwork, training and development) and non- significance of one element (reward system) to quality healthcare. The findings were further explicated to identify which component of quality care that influenced HRMPs and at what level. The aim is to generate in-depth knowledge that will guide decision- making and policy in healthcare.

Therefore, the study revealed that human resource management practices (HRMP) account for around 21% of the observed variability in quality of healthcare (QHC) signifying a substantial and statistically significant impact. This percentage often referred to as the coefficient of determination or R-squared, serves as a measure of the proportion of variability in the dependent variable (QHC) explained by the independent variable (HRMP). In this context, the 21% indicates that HRMP is a key contributor to the variations in healthcare quality, which is in line with previous literature highlighting the significance of HRMP in quality of healthcare in the Nigerian context (Oduwusi, 2018). The significance of this finding extends beyond a mere correlation, suggesting a meaningful relationship between how human resources are managed and the resultant quality of healthcare. This quantification provides valuable insights for healthcare practitioners, administrators, and policymakers, emphasizing the strategic importance of effective HRMP in achieving and maintaining quality healthcare standards. As HRMP encompasses aspects such as recruitment, rewarding, training, and staff retention, this study underlines the critical role of human resource strategies in shaping the quality and effectiveness of healthcare delivery within a given context.

In addition, the four sub-constructs of HRMPs were individually tested on quality of healthcare (QHC) components and the result revealed as follows. Teamwork (TW) is recognized to be the determining factor and have the greatest influence in quality healthcare (QHC) with an R- squared value of 20%, followed by Recruitment (RC) with an R- squared value of 13.7%, training, and development (T&D) with an R- squared value of 10.5%. On the other hand, Reward system although has an R-squared value of 16.6%, it is the only variable

among HRMPs that is not statistically significant with quality healthcare possibly due to various factors which will be discussed later in the chapter.

Furthermore, it was noted that there is a unique peculiarity in all the four sub-constructs of HRMP on one of the measurement tool defined as “*The patients complain of long waiting time*”. This was found to be non- significant when simulated against quality healthcare (QHC). Although, patient waiting time is an essential component in the outcome of quality care and it often reflects patient satisfaction with the services rendered (Biya et al., 2022). However, in the Nigerian context a review of literature indicated dissimilar views. Adindu & Esu (2012) study conducted in the South-South of Nigeria demonstrated that patient’s perception about waiting time are individualistic and they do not consider waiting time as an impediment to quality care rather patients are more concerned with other determinants of quality services received. Betiku et al. (2021) attested in their study at South- West of the country, revealed that patient dissatisfaction with the waiting time was low at only 17.2% of the studied population. Another study in the South- Eastern part of Nigeria demonstrated a dissatisfaction level of 35.6% (Okoloagu & Ndibuagu, 2023).

Building on the previous literature, this current study disclosed waiting time as non - significant probably because the study did not investigate patient perception but the health professionals. Despite the above statement, the non- significance of waiting time may be assumed to be related to patient adaptation, which is associated with cultural issues in Nigeria such as the problem tagged “African time” (The universal slackness or indifferent attitude of Africans about time).

Nevertheless, the findings will guide policy as it further buttressed the urgent need to look into patients waiting time in the hospitals or clinics with an aim to improve quality care services in Nigeria. Long waiting time is a potential barrier to accessing quality care and has been highlighted as a pointer for health system in distress (Mcintyre & Chow, 2020).

Human resource management practices: Recruitment (HRMP- RC)

In the complex healthcare setting, recruitment has a crucial role in shaping the constant change of health institution management and policy development. The result of R-squared value of 13.7% evidenced statistical significance of recruitment on analysis of the relationship between recruitment and quality healthcare as indicated in H1. However, when examined on each quality component, recruitment was not significant on H1a and H1c (Structure and Outcome) but significant only on H1b (Process). As one of the most critical components of human resource management, the process of hiring and on boarding healthcare professionals significantly impacts the efficiency, quality of care, and strategic direction of a hospital. However, investigation of the three hypothesis on recruitment on three components of quality care: structure, process and outcome respectively, revealed that recruitment was only significant to quality process and non- significant to structure and outcome.

In practical terms, good recruitment practices ensure that hospitals attract individuals with the right skills, experience, and qualifications and thus contribute to improved patient outcomes. Recruitment is the basis for gathering skilled and knowledgeable workforce within an organization and integration of a competency- based recruitment process facilitates identification and selection of individuals such as doctors, nurses, and others possessing the requisite skills and knowledge for optimal performance. According to Collins (2021), competency- based approaches utilize a rigorous assessment of skills, experiences, and qualifications to ensure that the selected candidates align with the demands required to meet the complex needs of patients. Organizations that employ competency- based recruitment methods exhibit high levels of staff competence, and that result to improved health outcomes and the quality of care.

Consequently, quality of healthcare services is linked to the competencies and expertise of the personnel providing care. Efficient recruitment practices go beyond just identifying and

hiring of individuals; they involve strategic workforce planning to ensure right mix of skills among the staff. This will lead to avoidance of the unexpected and undesired consequences of wrong skill mix. Tamburello (2023) equated right skill mix to having the right number of staff because it helps to reduce or prevent burnout on the workforces which will have negative impact on patients, healthcare personnel's and the organization as a whole. Review of literatures revealed a positive relationship between the efficiency of recruitment practices and the skill mix of healthcare teams, which directly influence the quality of services provided (Ahmat et al., 2022; Bomide, 2024; Norskov et al, 2022).

The on boarding process is another critical phase in the employee lifecycle. Efficient on boarding is not merely an administrative formality but a strategic process that integrates new staff into the organization's culture and equips them with the necessary work behaviours for quality service delivery (Godinho et al, 2023). Recruitment process has a substantial influence on the organizational culture. The values, attitudes, and behaviours of health professionals shape the work environment and, consequently, affect the general morale and job satisfaction of the workforces. Organization that prioritize a positive and collaborative culture during the recruitment process tend to generate better communication, teamwork, and employee engagement. This, in turn, affects the efficiency of care operations and enhances the patient experience positively.

In the context of hospital management, effective recruitment practices contribute to strategic human resource planning and aligning of staff with the organization's goals and objectives. Strategic recruitment enables human resource and management to identify the skill sets required to achieve the objectives and build a workforce that supports the long-term vision of the institution (Eneh & Awara, 2016). Help to address workforce shortages and skill gaps, proactively identify areas of potential shortages and develop strategies to attract talent in those specific fields, anticipate the evolving needs of patient populations and advancements in

medical technologies. Through this approach, the organization will have experienced and adequately staffed workforce to meet the demands of patient care and be well informed about health organization developments.

Recruitment interconnects with policy development and healthcare settings policies and these are instrumental in guiding decision-making, ensuring compliance with organization, professional and government regulations, maintaining integrity and quality of healthcare services (Suji & Marandi, 2021). The recruitment process is an opportunity for health institutions to embed vital policy considerations into the system. For example, a hospital may establish policy related to diversity and inclusion during the recruitment process and thus promote a workforce that reflects the diverse patient populations. It can equally contribute to the development of policies related to staff training and development. Hospitals that invest in the continuous education and professional growth of staff build an environment that values ongoing learning.

Nevertheless, the adoption of efficient recruitment has some recognized challenges. Mukhuty et al. (2022) stressed the challenges associated with recruiting committed workforce and suggested the adoption of innovative approach towards recruitment. Other studies buttressed the significance of recruitment to quality healthcare service and recommended implementation of incentive management system, a strategy that will generally address and promote staff training, rewards, motivation, organizational culture, leadership and others (AlQathmi & Zedan, 2021). This will go a long way to curb the predicament of Nigerian staffing processes that often rely on corrupt practices such as nepotism, ethnicity, and sectionalism, religious, and political prejudices, which (Oboh et al., 2021) stressed to hinder optimal service delivery. The outcome will be selection of competent, skilful and experienced individual with the capability and commitment to provide high quality service and improve the overall performance (Aliyu, 2023).

Generally, recruitment is a complex process that influences hospital management and policy development. It shapes the workforce, builds the tendency for good organizational culture, and effective recruitment practices. All these are requirements for organization seeking to provide quality patient care, intends to thrive in the changing healthcare environment, as well as align recruitment with the institution strategic objectives. The connection between the recruitment processes can assist hospital management, human resource and government to create strong and progressive healthcare institutions.

Human resource management practices: Reward system (HRMP- RW)

The findings presented as non-significant relationship at the $p = 0.05$ significance level, based on the current sample and methodology implies, there is insufficient evidence to assert a direct and substantial impact of reward system practices on the quality of healthcare within the hospital of study despite having R-squared value of 16.6% as identified in H2. Health management may initially interpret this as a signal that efforts focused mainly on enhancement of reward system processes may not be the primary driver of improvement in healthcare quality. The suggestion to reject H2, H2b, and H2c does not imply an absolute absence of relationship. It is important to note that while the relationship is not deemed statistically significant at the 0.05 level; this does not infer the absence of a real-world relationship. However, it is worthy to note, that although broad analysis of reward system and QHC revealed non-significant relationship however evaluation on each component of QHC showed a marginal statistical significance between reward system and quality healthcare structure (H2a). This demonstrated the importance of individual QHC component analysis, which delved deeper to generate subtle results, which may have been overlooked.

However, analyses were conducted on the reward system predictors, with focus on *performance-related pay and the possibility of promotion identified as not statistically significant* to enhance understanding. Lack of significant relationship could possibly be due to

individual perception of reward and motivation, and that can be subjective or influenced by personal values. Martin et al. (2020) postulated that the influence of monetary incentives as a motivational factor could be weakened by people's emotional disposition toward the inducements. While an employee might claim that performance-related pay motivates him or her to work hard, it does not necessarily mean that this perceived motivation often translates to better quality for all health organizations. The ability of an individual to improve performance is mostly associated with the reward at stake hence, the value an individual attach to a reward determines the degree of effort to invest in attempting to get the reward and that varies from person to person. In addition, reward can be linked to cultural factors, which were not measured in this study. However, several studies postulated the cultural challenges of reward system within the work environment and recommended incorporating cultural values into organization reward practice (Adamovic, 2023; Caprar et al., 2022). In the Nigerian context, (Adegbite et al., 2020; Olukayode et al., 2021) acknowledged reward system challenges and attributed it to poor management of recompense practices. Further review of literature, suggested that reward system is often based on godfatherism, favouritism and other similar vices, as well as policies and organizational cultures (Ahmed et al., 2022).

Furthermore, other possible factors associated with poor significance of the measured indicators may be related to participants' age, years of experience and gender. It was noted from the data generated, that the largest number of participants are within the ages of 21 – 30, numbering 122 individuals and their years of experiences fall within 1- 3years. In addition, a large number of the participants were female constituting 65.34% of the data collected. It was assumed that the young and inexperienced graduate predominately female, presumably at the early years of their career are mostly interested in earning money to meet their basic needs post qualification from school than aspiring for promotion or higher position. This will prompt hospital management and policymakers to consider a broader approach to investigating reward

system. On the contrary, H1a of reward system has marginal significance with influence on quality structure only not on process and outcome component of quality. Thus, the reward system forecasters: non-monetary rewards and a fair reward system demonstrated minimal statistical significance as predictors of quality care, which aligned with established Herzberg's motivational theory, acknowledging the psychological importance of staff recognition, feeling of respect, accomplishment and satisfaction, which enhances retention and higher performance (Akinwale & George, 2020; Manzoor et al, 2021).

A well-designed reward system is a powerful tool that can powerfully guide hospital management and policy development. A review of literature revealed that some hospital in Nigeria has developed reward policies but uniformity and supposed fairness remains questionable (Olanike, 2025). In the constant changing healthcare environment, attracting, retaining, and motivating talented health workforce is essential for the efficient functioning of hospitals. The reward system consisting of intrinsic and extrinsic reward such as financial incentives, recognition, and career development opportunities and others plays a role in staff positive work behaviour subsequently, influences organizational management and policy formulation. The reward system overlaps with policy development particularly in areas of performance evaluations, promotions, and career advancement. Clear and transparent policies regarding how rewards are linked to performance can help create a fair and equitable work setting. For example, policies for merit-based promotions or guidelines for recognizing outstanding contributions to patient care. Policies can relate to employee wellness and work-life balance, an essential element among Nigerian healthcare workers (Akinyemi et al, 2022). Health organizations that consider the well-being of their staff may develop policies that promote a healthy work-life balance, offer flexible scheduling, or provide support for mental health. Alignment of these policies with the total reward system will enable hospital management to demonstrate a commitment to the general welfare of their workforces.

Financial rewards can influence the behaviour of health professionals and be used as a tool to reinforce and promote the mission and values in line with the strategic goals. Thus, performance-based bonuses or incentives can be tied to specific quality metrics that drive employees to focus on quality patient care services and achievement of positive outcomes. In addition, the aspiration for a higher position or promotion as a motivator for increased performance is individualistic and may not generalize across the entire workforce. This relates to (Sui et al, 2023) suggestion that persons' response to incentives are personal and biased in comparison to other person's response to similar incentive. The diversity in personal goals and ambitions makes it challenging to identify a uniform pattern because not all professionals may share the same career objectives and the impact of potential career advancement on job performance could differ widely among people.

Reward system influence on structure can be attributed to the fact that structure as indicated in Donabedian quality of care model comprises of the organizational building, equipment, workforce and others (Donabedian, 1988). The only component in structure that reward can substantially influence appears to be human resource, this is because reward motivates people hence; it is not an aberration that it failed to influence process and the outcome in this study. Several studies highlighted the importance of reward on staff motivation and achievement of organizational goals. The concept of rewards as an inner drive to meet or exceed patient quality expectations aligns with well-established motivational theories such as Herzberg's two-factor model of motivation. According to this theory, individuals are motivated by external and internal stimuli, including rewards, to perform at a higher level. In healthcare, monetary incentives can serve as tangible reinforcements, which drives the workforce to invest extra effort in providing quality care (Manzoor et al, 2021).

However, a review of literature confirmed that non-monetary reward has great influences on employees work behaviour and performance (Ngwa et al., 2019; Qader, 2021).

These intrinsic rewards such as recognition, appreciation, career advancement, praises, feeling of accomplishment among others are acknowledged to contribute to staff motivation and job satisfaction thereby lead to enhanced performance, quality and set goals attainment (Ngwa et al., 2019; Opio et al., 2022). Intrinsic reward generates inner drive that motivates staff to realize individual and organizational goals through self-generated determination, interest and work behaviours that produce positive outcome. This current study finding on intrinsic reward system is similar with (Akinwale & George, 2020; Opio et al., 2022) which emphasized the significance of intrinsic reward to health workers. It is worthy to note that majority of the respondents are below the age of 40years, another similarity and thus, reinforcing the importance of further study on the middle aged.

In this study, extrinsic reward appears insignificant in quality healthcare and a component increase in it results to 0.1% increase in quality healthcare. This finding is similar to previous studies conducted in comparable but different health settings. According to Hee et al. (2016), intrinsically motivated nurse possesses self-gratification and desire in executing duties without seeking for external rewards. The scholars further attested that the internally generated passion enables the workforce to perform their job successfully with dedication and diligence recognizing that they are valuable members of the organization. This was buttressed by (Manzoor et al., 2021) postulated that higher performance and attempts to progress professionally are recognized among intrinsically rewarded workforces. Thus, the importance of intrinsic reward cannot be underrated. The current result support that intrinsic reward is significant in improving quality care among healthcare workers in Nigeria. Although, extrinsic rewards appear to be the greatest option for staff motivation because many institutions consistently adopt monetary reward to motivate the workforces (Hee et al, 2016). Despite the fact that intrinsic reward is less expensive yet employers relies majorly on the exchange theory

that advocates payment for the services rendered which often comes in form of tangible reward (Opio et al, 2022).

Nevertheless, the study recommends greater attention to intrinsic reward system for healthcare professional as a motivator and that is in line with Herzberg's two-factor theory of motivation. Although, the study is not proposing eradication of extrinsic reward because financial or tangible reward is still a vital part of reward system that is highly essential for meeting daily or basic needs. Rather, the study is proposing that simply offering extrinsic reward might not be enough to improve or influence how human resources or workforces are managed within health organization in Nigeria. Implementing interventions that will focus on intrinsic reward such as certificate of appreciation to staff, praise or recognition for great performances or other fringe benefits individually or as a team might be necessary to enhance staff motivation and enhanced quality performance. It is worthy to note that a positive relationship between reward system (intrinsic motivation) and the workforces' performances has been established (Bomide, 2024; Ngwa et al, 2019). Therefore, a higher level of commitment of an organization to the staff intrinsic reward system will potentially lead to enhanced quality, efficiency, performance and productivity.

According to (Bomide, 2024; Mitsakis & Galanakis, 2022) as stipulated in Herzberg's theory, staff motivation and well-being were driven by intrinsic factors such as achievement, recognition, and opportunities for personal growth. These factors sustain job satisfaction, leading to better employee work engagement and motivation. On the other hand, the extrinsic or hygiene factors, which includes work conditions, level of supervision, and organizational policies do not necessarily enhance motivation or satisfaction but their absence often lead to dissatisfaction. Overall, this theory highlighted that motivators or intrinsic factors are key driver for long-term job satisfaction and fulfilment whereas, hygiene or extrinsic factors are essential for averting dissatisfaction by maintaining baseline satisfaction.

Several studies on reward system across different organizations in Nigeria disclosed financial reward play a major role in improving employees' performances (Enemuo & Olateju, 2021; Uzochukwu et al., 2023). In Nigerian health sector, evidences revealed the positive impact of reward system on worker's performances (Akpan, 2021; Bomide, 2024; Onyeka et al., 2020). Thus, Uzochukwu et al. (2023) stressed that the use of monetary reward to motivate staff and improve quality of care services has been a prevalent approach in health system. However, the fact that it is a predominant method of rewarding health workers, does not essentially mean it promotes quality care delivery, especially considering the current poor state of healthcare in the country. On the other hand, (Noorazem et al., 2021) emphasized there is no associated between employee performance and financial reward. In addition, Heider and Mang (2020) highlighted that reward system has been widely assumed to influence employees work performances but with no significant evidence that it improves quality of care thereby supporting this study finding on reward system and quality of care. This undoubtedly implies that further study is required to evaluate different and broader perspectives of reward system on quality-of-care component.

Nevertheless, further elucidation on the lack of significance of reward in this study can be attributed to certain factors such as young and early careers, larger number of females and high proportion of nurses. Hence, 34.45% of the respondents are 21 to 30 years and another 34.45% are within 1 to 3 years work experience. Early career individuals might focus on learning and professional development, and conducive work environment above financial rewards. Previous studies suggest that young career individuals value upward leadership roles and intrinsic rewards than salary rewards (Umuteme, 2020). They may not be fully motivated by financial incentives leading to a lack of significance in the data for rewards. In addition, younger employees might have different financial responsibilities compared to older counterparts, further reducing the impact of rewards.

Research suggests that women in the workplace may place higher value on interpersonal relationships and supportive work environments rather than rewards alone (Phelan, 1994). This could further explain why rewards are not a significant factor. There is more pressure on men to succeed than women (Nguyen Van et al., 2018).

Nurses placed slightly greater importance on several non-financial rewards compared to financial ones. Non-financial reward categories such as recognition and feedback from colleagues, work-life balance, career development opportunities, influence, and participation were strongly associated with the perceived importance of rewards (Seitovirta et al., 2017). This could dilute the perceived significance of rewards in the data.

Overall, young and early career workforces, large number of female professionals and nurses could potentially explain why rewards (an extrinsic motivator) lack significance in this study.

Human resource management practices: Teamwork (HRMP- TW)

The study finding supports that good work relationships among health professionals and an encouraging work environment is an essential predictor of quality healthcare. Teamwork topped when simulated with other variables accounting for R- squared value of 20%, thus, teamwork has the highest value among others. Although, teamwork was significant in relation to quality healthcare cumulatively as specified in H3, but when subjected for more investigation on each quality components: structure, process and outcome as indicated in H3a, H3b and H3c. It was revealed that teamwork is only significant on H3c, which is the outcome of quality care. However, the influence of teamwork is proactive on team effectiveness because of the direct link investigated in hypothesis H3 that was statistically significant and positive. From a predictive perspective, the high R- square value suggests that teamwork is the major determining factor in quality care delivery. Positive interpersonal relationships within the health team contribute greatly to job satisfaction and the total well-being. When colleagues

share positive work relationship, communication flows seamlessly, enabling a supportive atmosphere where trust and mutual respect thrive (Schmutz et al, 2019). This positive work environment is important for creating a culture that prioritizes patient care and safety. Chandrashekar and Mohan (2019) demonstrated a strong relationship between team cohesion, job satisfaction, and improved patient outcomes. Teams with good interpersonal relationships tend to exhibit high levels of collaboration, reducing the likelihood of errors and improving the totality of quality care services (Aaberg et al, 2019).

However, review of literature and the current study finding revealed the effectiveness of teamwork in healthcare, which involves equitable distribution of responsibilities among members. When each team member is actively involved and contribute to the shared workload, tasks are completed more efficiently, timely and the likelihood of errors are minimized (Jepkosgei et al., 2022). A fair distribution of responsibilities results to improved job satisfaction and reduced burnout among the professionals. Hence, there is a positive connection between shared responsibilities and key performance indicators such as patient satisfaction and adherence to treatment protocols. It equally indicates that teams, which share responsibilities are better, equipped to handle the complexities of healthcare delivery, resulting in enhanced patient care and quality outcomes (Zajac et al, 2021). Operational efficiency is enhanced through collaboration among physicians, nurses and other allied health professionals by providing coordinated and seamless patient care. The study revealed that the synergy created by combined group efforts leads to enhanced performance metrics. Furthermore, teamwork influences hospital management by contributing to employee satisfaction and retention. A positive team-oriented environment generates sense of belonging and support among staff, reducing burnout and turnover rates (De Hert, 2020). Health human resource and management should recognize the impact of teamwork and establish team-oriented culture that encourages

open communication and mutual respect, to enhance the efficiency of workflows, reduction in errors, and ultimately improve patient satisfaction and health outcomes (Wu et al, 2021).

In the context of policy development, teamwork also contributes to the implementation and adherence to policies. A unified team is more likely to embrace and implement policies, promoting a culture of accountability and compliance. Multidisciplinary teams jointly develop policies related to patient care protocols, safety measures, and quality standards. The diverse perspectives and expertise of healthcare professionals should align with best practices and evidence-based approaches to inform policies. Therefore, human resources and the management must emphasize the importance of teamwork in the policy implementation process and ensure staff understands the rationale behind the policies for active participation and implementation. For example, policy on knowledge sharing which a critical aspect of good teamwork in healthcare. When team members exchange information and insights, it leads to a mutual understanding that can affect patient care (Diab, 2021) and this supports the idea that knowledge sharing have positive influence on the quality-of-care services. Teams that actively engage in knowledge sharing are better positioned to adapt to new information, technologies, treatment modalities and error reduction (Zajac et al, 2021).

In healthcare, collaborative decision-making is fundamental to ensuring that diverse perspectives are considered when determining the best course of action in patient treatment and care especially with the evolving complex medical cases and challenges (Chung et al, 2021). Multidisciplinary teams bring together professionals with different perspectives and expertise, allowing for more comprehensive problem analysis and innovative solutions. Interdisciplinary team with shared goals working collaboratively to improve service delivery, efficiency, quality of care, patient satisfaction, job satisfaction, reduction in medical errors, waste and patient morbidity (Jepkosgei et al, 2022)

Furthermore, the consideration of individual concerns within the decision-making process contributes to team cohesion and satisfaction. Teams engaged in joint decision-making demonstrate improved problem-solving abilities and better adaptability to changing circumstances. Hence, teams with a collaborative decision-making approach experience improved patient outcomes and greater adherence to evidence-based practices. Hospitals that prioritize teamwork empower their staff to contribute ideas, share insights, and collectively address challenges, thereby enhancing the decision-making process at various levels of the organization. Team based approach to care, has become a substantial tool for building and sustaining optimal and quality healthcare services globally. Studies from (Mansuri et al, 2023) proposed team work and collective practice theories in healthcare for promotion of quality care. Compliance will contribute to improved decision-making and enable the team members to be knowledgeable with the current advancements in healthcare.

Lack of effective teamwork have been demonstrated as the bane for disjointed and weak healthcare system in Nigeria and the sub-Saharan Africa. The fragmented health system is attributed to lack of synchronization among the skilled professionals comprising of doctors, pharmacists, nurses, laboratory scientists, dieticians, physiotherapists and others (Mohammed et al, 2021). The scholars additionally identified rivalry among interdisciplinary team, remuneration discrepancies, and ineffective communication among others as the key basis for the disharmony. Furthermore, moderate teamwork could be equally be related to the dominance of medical power among medical professionals, which have negative impact on teamwork (Atwal & Caldwell, 2006). Thus, having recognized the potential challenge associated with lack of harmony, there is need for management to enhance teamwork using various approaches such as:

Encourage reward based on team accomplishment rather than individual reward. Studies demonstrated that compensation disparities breed jealousy and mistrust among the

members leading to a breakdown in team cohesion and reduction of performance. Improve team building activities and interventions such as stimulation trainings, inter-professional trainings. Adopt team- based culture that promotes transparency, shared values and principles.

This correlated with literature (Depken, 2000) demonstrated that often people within the same profession, with similar qualification and experiences might not earn same salary and this may affect teamwork particularly when some individuals realized they earn lesser wages than their colleagues do. Nevertheless, since this is not the aim of the current study, there will be need for further studies on reward because salary is personal and people's perception on the topic will be better examined through a recommended qualitative study.

It is worthy to note, that this study result revealed teamwork as a one of the driving force of quality healthcare. The findings showed its essentiality in high quality patient care, operational efficiency, strategic direction of the organization and policy development. Effective teamwork contributes to a positive organizational culture, improve communication and informs the development of policies that promote patient safety, staff satisfaction, and the hospital success. Active promotion of teamwork builds a favourable workplace for continuous improvement, innovation, successful policy implementation and positive health outcome.

Human resource management practices: Training and Development (HRMP- T& D)

The findings on influence of training and development on quality healthcare showed a significant relationship with R- squared value of 10.5%. Training and development were statistically significant when tested on all the quality healthcare components as stated in H4. However, on further examination on each element of quality care as specified in H4a, H4b and H4c, training and development was only significant on H4b and that is the process aspect of quality care. This could be related to the knowledge and skills acquired by the workforces, which enables them to deliver evidence-based care to patients. According to Donabedian model of quality care, process consists of all the activities and the workflow involved in providing

patient care from the first point of contact into the health institution until the end of treatment or care to attain positive health outcome (Panteli et al, 2019). This implies that training and development influences quality care through the enhanced clinical skills and competencies among the healthcare workforce (Akinyemi et al, 2022; Salami et al, 2022).

Ongoing training programs ensure the professionals are well informed on modern medical advancements, technologies, best practices and high standards of patient care. The finding illustrated that staff opportunity for skill development through training is a statistical significant predictor of quality healthcare. The analyses revealed a clear relationship between training opportunities and enhanced skillsets, providing tangible evidence of the impact of professional development on job performance. Different research highlighted that health workers participating in skill development programs exhibited advanced level of proficiency in their roles (Taylor et al., 2021). In the rapid changing health environment with increased technology, significance was found in providing training to cope with these changes. Studies by (Bail et al, 2022; Joubert & Reid, 2023; Okunade et al, 2023) demonstrated that health personnel's who received adequate training to adjust to changing health technology were better equipped to provide quality care.

Furthermore, training and development initiatives influence the management by addressing succession planning. To recognize and develop talent within the organization will help the management to build qualified individuals prepared to assume key roles in the future. Succession planning is essential for maintaining organizational continuity, particularly in leadership positions. Ali et al., (2019, p. 112) described succession planning as “a long-term systemic process of determining goals, needs, and roles within an organization and preparing individuals or employee groups for responsibilities relative to work needed within an organization.” Hospitals that strategically invest in training and development reduce the risk of turnover in key roles and ensures a smooth transition when leadership changes occur because

there is opportunity for career advancement (Salami et al, 2022). In addition, T& D contribute to the development of leadership skills among health workers. Leadership training programs empower individuals at various levels of the organization to assume leadership roles and responsibilities (Ali et al., 2019). This is critical for driving organizational change, daily operational activities and providing patient care among professionals particularly in emergencies where quick decision-making can save life.

From the study findings, another critical element of quality healthcare is the provision of constructive feedback from managers. There is a strong correlation between constructive feedback and increased knowledge, leading to improved performance (Aslam & Khan, 2020). Scholars found that healthcare professionals who received regular constructive feedback reported higher levels of job satisfaction and demonstrated a commitment to continuous improvement (Burgess et al, 2020). This study established a significant relationship between constructive feedback and heightened knowledge, which is vital for ensuring quality healthcare services.

Likewise, the importance of attending yearly mandatory training sessions in hospitals is evident in its positive impact on knowledge acquisition and talent enhancement leading to optimal job performance. Review of literature revealed that health workers who regularly engage in mandatory training exhibited high levels of competence in their duties (Gil-Lacruz, et al, 2019). The association between knowledge obtained through training and an increased sense of self-worth is a crucial forecaster of quality care. Through this correlation, the evaluation can unveil the insightful impact of training on the professionals' perception regarding their roles and contributions to quality patient care. Research by Salami et al (2022) demonstrated a strong positive link between knowledge gained through training and heightened self-worth among the professionals.

In policy development, training and development initiatives can contribute to the creation and implementation of policies related to staff competencies, professional standards, and patient safety. The commitment to education can be formalized through the development of policies that outline opportunities for professional development, training programs, support for employee further education in order to meet up with the complexities of healthcare and upholding of ethical standards (Willie, 2023). Policies are established to ensure all health personnel's meet and maintain the necessary qualifications and licenses for their roles according to the professional, state and federal regulations. Therefore, training programs contribute to the ongoing education required to comply with these policies and professional regulations. Policies related to mandatory training, continuing education, and professional certifications are essential components of a comprehensive approach to maintaining a highly skilled and qualified workforce (Bhatia, 2021). For instance, the use of telemedicine may require the development of policies guiding its use, and training programs, which can prepare the workforce to deliver care efficiently using the new technological medical device.

Thus, training and development influence healthcare management and policy development through skill enhancement, training, leadership and compliance with professional and organizational standards. Health facilities that invest on training initiatives create a culture of continuous learning and quality, and have a competitive edge over rivalries in the constant changing healthcare environment.

Quality Healthcare (QHC)

The quality of care model, developed by Avedis Donabedian, is a framework in healthcare quality assessment that divides the evaluation of healthcare services into three key components: structure, process, and outcome. This model played a crucial role in determining the quality improvement strategies and policy development for example, quality assurance programs and promotion of patient-centred approach to care. The trio (structure, process and

outcome) provides a holistic view that helps health organizations to identify strengths and weaknesses in their systems. Policymakers, administrators, and clinicians can use this model to implement targeted improvements, enhance patient safety, and quality of care services.

Through a well-established structure, policies that govern clinical practices, patient safety, risk management and operational standards are developed to ensure consistency and adherence to best practices (Bhatia, 2021). Some of these policies define safety protocols, infection control measures, and emergency response procedures. In addition, policies aimed to minimize errors, reduce adverse events, and ensure a safe environment for both patients and the professionals. Whereas, the process ensures promotion of high standards of patient care based on the established guidelines to improve health outcomes and the reputation of the organization. These they achieve through continuous quality improvement initiatives such as monitoring, assessment, and improvement of their processes to ensure consistent high care quality. Performance data are used to identify areas for improvement, implement changes, and assess the impact of those changes on patient outcomes. This continuous quality improvement cycle is essential for maintaining and enhancing the effectiveness of operations. Moreover, the achievement of positive health outcomes reflects the effectiveness of patient care, organizational culture and the formulation of policies aimed at improving healthcare delivery. This impacts staff morale, teamwork, and job satisfaction thereby contribute to the hospital's ability to attract and retain top talents.

Furthermore, structure influences the strategic management decisions connected to resource allocation, capacity planning, and technology adoption. There is need to be strategic in managing organization resources, including staff, equipment, and facilities, to meet the demands of patient care therefore, structure guides management in allocating resources where they are most needed. While, processes effect hospital management decision on promotion of patient-centred care, maintenance of clear communication, establishment of trust between

patients and the workforces. It equally entails making attempt to understand and meet individual patient needs as well as involve patients in their treatment plans/ care with consideration to their preferences. Finally, positive health outcomes contribute to the hospital's reputation, patient satisfaction, and financial stability, likelihood to attract new and retain existing patients.

Quality Healthcare – Structure (QHC- S)

The first component of quality care, structure, focuses on the environment in which healthcare is provided. It includes the physical and organizational attributes of the care facilities, such as the availability of qualified staff, equipment, and the building (Ameh et al, 2017). Donabedian recognized that the quality of care is influenced by the underlying infrastructure, and a well-organized and equipped healthcare system has a potential for quality services delivery.

Structural aspect of healthcare such as patient clothing and linens are part of the physical environment, which contributes to a positive patient experience but assessing quality care requires a comprehensive examination of clinical efficacy, adherence to evidence-based practices and the efficiency of medical interventions that can predict patient outcomes. Focusing on patient clothing and linens can lead to neglect in the diversity of structural factors that jointly influence the quality of healthcare services. Patients may express contentment with the provided clothing and linens, but this does not translate into better health outcomes. For instance, a patient might feel comfortable with the linens but still experience adverse clinical events due to factors unrelated to the physical environment, such as the appropriateness of medical treatments or the skill of healthcare professionals. Although, a comfortable and safe physical environment is conducive to patient well-being, but the direct link between the provision of clothing and linens and clinical outcomes is not well established.

Furthermore, quality care involves a holistic approach that encompasses not just the physical well-being of patients but also their mental and emotional states. Comfortable clothing and linens contribute to physical comfort, but they may not address the psychological and emotional aspects of patient care. Factors such as communication with healthcare providers, emotional support, and involvement in decision-making also play a fundamental role in determining entire healthcare quality (Panteli et al, 2019). Structure alone may not capture the active interactions between the quality healthcare dimensions. For instance, the efficiency of healthcare delivery processes, such as timely access to medical care and effective communication among the providers, plays an essential role in determining total healthcare quality. Thus, some notable structural elements contribute to the general quality of care provided to patients. These identified structure factors consist of: adequate hospital equipment, clean and hygienic environment and safe ward spaces, opportunities for communication with management, good managerial communication, and investment in technological-scientific knowledge. The reasons behind the significance of each of these factors in promoting and ensuring quality healthcare are discussed below.

Presence of adequate and functioning hospital equipment are crucial structural elements of healthcare quality due to their direct impact on patient care outcomes. Modern medical care relies on advanced technology and equipment to diagnose, monitor, and treat various medical conditions. Hospitals with access to a wide range of well-maintained and up-to-date equipment, and adequate health workers can deliver accurate diagnoses and treatments, ultimately improving patient outcomes (Geta et al., 2023; Ratwani et al., 2023). The importance arises from the measurable impact of equipment on clinical outcomes. Studies showed that hospitals with advanced medical technology and well-maintained equipment experience lower rates of medical errors, reduced complications, and improved patient satisfaction (Zamzam et al, 2021).

By providing healthcare professionals with the tools they need, hospitals contribute to the delivery of safe, efficient, and effective care.

A clean and hygienic hospital environment is another critical factor, primarily because of the key role in infection prevention and control. Healthcare-associated infections (HAIs) pose a substantial threat to patient safety and contribute to increased morbidity and mortality rates. A clean environment, together with rigorous infection control measures, reduces the risk of HAIs thus; create a safe healthcare setting for both patients and healthcare providers. Research established that efficient hygiene practices and infection control measures result in lower infection rates, shorter hospital stays, and decreased healthcare costs (Szabo et al., 2022). The meaning of a clean environment as a forecaster of structure highlights its role in preventing the spread of infections and promoting an environment conducive to patient recovery.

The design and layout of ward spaces is fundamental in ensuring patient safety and minimizing the risk of harm. Adequate space, proper signage, appropriate lighting, clear demarcation of units and strategic placement of equipment contribute to the safety of patients, families, visitors and the providers. Review of literature (Rapport et al., 2020) indicated that properly designed and organized ward spaces reduce the likelihood of patient falls and other adverse events, promote safety and patient satisfaction. Ensuring that patients can move safely within the hospital environment, and personnel's can efficiently navigate their workspaces, is of high importance to quality of care. Thus, the safe design of ward spaces is significant due to its direct influence on patient safety and well-being.

The opportunity for health personnel to express ideas or concerns to management is a factor that contributes to a positive workplace environment and, consequently, quality care. Open communication channels promote a culture of collaboration, transparency, and continuous improvement. When healthcare professionals feel empowered to share their insights, it enhances the organizational learning process and promotes a sense of ownership

and engagement. Healthcare organizations with effective communication channels experience lower rates of burnout, increased job satisfaction, and better organizational performance (Nadkarni et al., 2021). The correlation between open communication and improved job satisfaction, retention rates, and employee well-being has a high statistical significance. Therefore, it has the ability to create a supportive and responsive workplace culture, eventually influence the quality of care provided to patients.

Effective managerial communication is another factor that has a direct influence on the performance and job satisfaction of healthcare workers. Ability of managers to communicate proactively with teams, provide feedback, guidance and opportunities for professional development, facilitates conducive environment for continuous learning and improvement (Oladiran & Burghate, 2021). Regular communication channels between managers and staff also expedite the timely identification and resolution of potential issues that contributes to a more efficient and effective healthcare system. Health institutions with good communication practices, experience high levels of employee satisfaction, reduced turnover rates, and improved patient outcomes (Mohammed, 2022).

The investment in technological-scientific knowledge to develop work and minimize errors is an essential element for quality care. Advancements in technology and scientific knowledge are integral to modern healthcare, influences diagnostic accuracy and treatment efficacy thereby leads to reduction in mortality and morbidity related to medical errors (Junaid et al, 2022; Yeung et al, 2023). Hospitals investment in ongoing education and training for healthcare professionals, as well as the integration of innovative technologies, position the organization towards quality care delivery. Embracing and investing in an emerging technology lead to reduced errors, improved patient outcomes and increased efficiency (Alolayyan et al., 2020). The significance of technological-scientific knowledge accentuates its role in shaping

the future of healthcare as well as ensure that providers are equipped with the latest knowledge and tools to deliver optimal patient care.

The importance of all the factors arise from their measurable impact on patient outcomes, safety, employee satisfaction, and general organizational performance. Through understanding and proper implementation of these structural elements, healthcare organizations can create favourable setting for quality care delivery. Adequate equipment and technology contribute to accurate diagnoses and effective treatments. A clean environment reduces the risk of infections and supports patient recovery. Safe ward spaces minimize the potential for harm and adverse events. Open communication channels and good managerial communication promotes a positive workplace culture, investment in technological-scientific knowledge ensures that healthcare staff stay well informed on the latest advancements. Healthcare organizations that address these factors enhance the well-being of patients and create a supportive and good environment for health professionals, leading to a holistic approach to quality healthcare delivery.

Since structure is an essential factor in effective healthcare provision and it involves the setting of health systems like the doctor consulting room, admission wards and many other. Structural aspect of quality enables health institutions to assess the quality of care by considering factors such as staffing levels, adequate medical equipment and resources, and the proficiency of the clinical team (Dunbar et al., 2021). Evaluating these structural indicators helps healthcare providers and organizations to determine their capacity to deliver quality care when confronted with high patient volume and demands.

Quality Healthcare – Process (QHC- P)

The process aspect of quality of care examines the activities and interactions between healthcare providers and patients during the delivery of care. It assesses the appropriateness, efficiency, and effectiveness of healthcare interventions. Evaluating the processes involved in

patient care, intends to identify areas for improvement in clinical practices, communication, and coordination among healthcare professionals.

Evaluating the study findings revealed some remarkable information. Patients' views of time spent during hospital visits seems to be subjective. Although, patient satisfaction is a crucial aspect of healthcare, but the perception of time spent does not necessarily relate with the actual quality of care provided. Patient satisfaction can be influenced by factors, such as communication, empathy, and perceived quality of care. However, some patients may recognize prolonged time in the hospital to be associated with different factors, including administrative processes, waiting environment and individual perception of long waiting time (Abdulsalam & Khan, 2020). Therefore, the subjective view of spending a long time during a hospital visit may not be a reliable indicator of the total quality of healthcare. In addition, the presence of nurse call bells is an essential component of patient care, facilitate timely responses to patient needs and promotes communication between patients and the nurses (Dugstad et al, 2020). Although reduction of waiting, time is important for patient satisfaction (Abdulsalam & Khan, 2020) yet it represents only one side of the broader process and may not guarantee statistical significance in predicting total quality of care. The availability of nurse call bells, contributes to specific aspects of patient experience, but may not dependently hold significance as an evaluator of quality care. Furthermore, addressing patient complaints effectively and in a timely manner is vital for patient satisfaction and quality improvement but not statistically significance in this study. Patient complaints, is an important feedback for improvement (van Dael et al, 2020) but not the sole metric for assessing the quality of healthcare delivery. It is noteworthy that patient satisfaction and feedback are essential but relying only on them may not accurately reflect the wide background of quality healthcare.

It is worthy to note that, the predictors of process consist of zero tolerance for patient abuse, personnel demonstrating concern for patient questions and worries, effective discharge

processes, support for informed decision-making, and clear communication of health information with patients and their families. A cornerstone of quality healthcare is the commitment to patient safety and well-being. Instituting a zero-tolerance policy for any form of abuse towards patients, whether verbal, physical, or otherwise, is a statistically significant process of quality. Research demonstrated that a safe and respectful environment has a positive influence on patient outcomes, satisfaction, and healthcare quality (Brubakk et al, 2021).

Studies from (Happell, 2020; Mahoney, 2022) have shown that healthcare organizations with stringent policies against patient abuse experience lower rates of adverse events, improved patient satisfaction scores, and better compliance with care protocols. A zero-tolerance approach and quality healthcare is evident in this study's data, highlighting the importance of maintaining a safe and secure environment for patients. According to (Sharkiya, 2023) effective communication between healthcare personnel and patients is integral to providing quality care. Ability of staff to demonstrate genuine concern for patient questions and worries is a notable significant process of quality care. According to Kwame and Petrucka (2021) when patients feel heard and understood, it affects their total experience and perception of care in a positive manner. Furthermore, patient-centered communication leads to higher level of patient satisfaction and improved health outcomes. Organizations that focus on personnel training in effective communication skills demonstrate better performance in patient experience metrics. The statistical significance lies in the correlation between personnel's demonstration of concern and positive patient outcomes, emphasizing the importance of patient-centered care in the delivery of quality healthcare.

The transition from hospital to home is a crucial phase in patient care, and effective discharge processes contribute to care quality. Organizations with well-defined discharge processes experience better patient outcomes, reduced length of stay in the hospital and increased patient satisfaction (Emes et al., 2019; Tyler et al., 2023). Discharge planning

comprises of patient and family preparation, medication reconciliation, and post-discharge follow-up, this approach has been recognized to improve patient outcomes. Implementation of effective discharge processes and positive healthcare outcomes, underlines the importance of a structured approach to patient transitions in ensuring quality care.

Empowering patients to be an active participant in the decisions about their healthcare is a fundamental principle of patient-centered care and a core value in healthcare and preventive services (Gultzow et al., 2021). When patients are supported in making informed decisions, it leads to greater satisfaction in the care experience, adherence to treatment plans, improved patient participation and better health outcomes. This was buttressed by (Emana et al, 2023; WHO, 2023) demonstrated that shared decision-making between healthcare providers and patients results in better patient engagement, increased treatment adherence, and improved quality of care. The link between support for informed decision-making and positive patient outcomes highlights the benefit of incorporating patients as active participants in their care, thereby contributing to quality care. Hence, World health Organization (2023) patient safety campaign emphasized the vital role of empowering patient and actively involving them in their care decision making with a slogan “Giving Patient a Voice” It emphasized that their opinion matters, makes them feel respected and promotes patient trust in the care provided.

Effective communication of health information is paramount in the delivery of quality care. When there is a clear and comprehensive communication between health providers and patients and their families, it enhances understanding, promotes adherence to treatment plans, and contributes to positive health outcomes. According to Ratna (2019), ineffective communication annuls attempt to provide standardized and quality care. Once a patient fails to understand his/her treatment or instruction/ information regarding the care provided, quality of care is compromised and could result to negative patient outcomes, repeated hospital visit and greater cost burden. Consequently, the consistent association between clear communication

and improved patient satisfaction, treatment adherence, reduced cost and health outcomes. Organizations that promote training on effective communication skills for health personnel tend to exhibit higher performance in quality metrics. This is because in healthcare system, communication has been a recognized therapeutic practice, a great and beneficial clinical skill that builds important relationships between patient and the providers (Govindaraju, 2021; Mersha et al., 2023). Therefore, organizations that prioritizes these practices will experience improved patient satisfaction, safety, and better quality of care. Recognizing the statistical significance of these process predictors highlights the importance of implementing patient-centered policies, developing a culture of respect and communication, and ensuring that healthcare delivery is effective and linked with the principles of patient-centered care. In this way, healthcare organizations can strive towards achieving and maintaining the highest standards of quality in patient care.

Overall, healthcare quality process measures aid evaluation on whether workplace protocols actually lead to improved patient outcome. The indicators usually conform to clinical and regulatory guidelines, which promote patient-centered care. For example, the processes can be implementation of procedures or practices to maintain appropriate nurse-to-patient ratios, minimizing shortages and burnout among staff, reducing workload to enable staff concentrate on providing individual patient care needs. Consequently, these practices will enhance safety protocols, smoothen workflow and reduces mortality rates within each department of the hospital.

Quality Healthcare – Outcome (QHC- O)

Outcomes represent the ultimate impact of healthcare services on patients' health and well-being. Donabedian (1988) emphasized that the true measure of quality is the impact of care on the patient's health status and satisfaction. Healthcare is a complex and intricate field where various determinants influence patient outcomes. Therefore, measuring outcomes will

help to provide an in-depth understanding of the effectiveness of healthcare interventions and guides efforts to enhance the quality of care.

Patient satisfaction surveys, when conducted after hospital visits, have emerged as a crucial tool in evaluating and predicting the quality of healthcare services. Moreover, the availability of sufficient supplies of the right medications plays a key role in promoting patient recovery. The statistical significance of these factors as outcome predictors in quality healthcare is evident when considering their impact on patient outcomes, healthcare delivery, and general system effectiveness.

Patient satisfaction surveys serve as valuable instruments to measure and quantify the subjective experience of individuals receiving care services and it serves as a quality indicator (Friedel et al., 2023). These surveys capture diverse aspects of the patient's journey, including communication with healthcare providers, perceived effectiveness of treatments, and satisfaction with the care received. When analyzed statistically, high levels of satisfaction recorded in these surveys are indicative of a positive patient experience, which, in turn, correlates with better health outcomes. There is a vast association between high patient satisfaction and improved adherence to treatment plans (AlOmari & Hamid, 2022). Satisfied patients are more likely to comply with prescribed medications, follow recommended lifestyle changes, and attend follow-up appointments. Adherence to medical advice and treatment regimens has a direct impact on health outcomes, leading to better management of chronic conditions, reduced complications, and improved well-being (Emana et al., 2023). Furthermore, patient satisfaction surveys contribute to the identification of areas for improvement within healthcare systems. By isolating specific aspects of care that contribute to dissatisfaction, healthcare providers can target interventions to enhance service delivery. Survey data can pinpoint weak areas in communication, waiting times, or facility cleanliness,

providing actionable insights for healthcare administrators to refine their processes and ultimately improve patient outcomes (Friedel et al., 2023).

The timing of patient satisfaction surveys, administered after hospital visits, is crucial for capturing the immediate and reflective aspects of the patient experience and satisfaction level (Perneger et al, 2020) Conducting surveys post-visit allows patients to provide feedback based on their real-time interactions with healthcare professionals and the care environment. This ensures that the feedback is relevant, accurate, and closely tied to the specific healthcare encounter, thereby, enhances the statistical reliability and validity of the survey results. Furthermore, patient satisfaction surveys are versatile instruments that can be designed to assess various dimensions of healthcare quality. For example, understanding the relationship between satisfaction with communication and post-operative complications or the link between perceived cleanliness and the incidence of hospital-acquired infections provides valuable insights for improving healthcare quality.

On the area of the supply of medications, having sufficient supplies of the right medications in predicting quality outcomes is rooted in the fundamental role of pharmacotherapy in patient recovery. Medications are primary tools in managing diseases, alleviating symptoms, and preventing complications (Yoshimura et al, 2022). Proper administration of the right medications are critical factors influencing health outcomes across diverse medical conditions. When the correct medications in adequate quantities are given to patient, the likelihood of treatment success increases. This is particularly evident in chronic disease management, where medication adherence is a key determinant of long-term health outcomes. Studies highlighted that patient with chronic conditions, such as diabetes or hypertension, who have reliable access to their prescribed medications exhibit better control of their conditions, reducing the risk of complications and hospitalizations (Pereira et al, 2022).

In emergencies and acute care settings, the availability of the right medications is crucial. Timely administration of appropriate drugs can be lifesaving and profoundly affect patient morbidity and mortality. Such scenarios demonstrate the relationship between prompt access to necessary medications and positive clinical outcomes, emphasizing the critical role of medication supply in quality healthcare. Patients are more likely to express satisfaction with their healthcare experience when they perceive that their treatment plan, including prescribed medications, is well- managed. The links between medication supply and patient satisfaction emphasize the connection among these factors and highlight the importance of a general approach to quality care (Yehualaw et al., 2023).

The assertion that an adequate and capable workforce directly facilitates improved health outcomes is grounded in intuitive reasoning and commonly accepted principles. However, when subjected to rigorous analysis, this relationship may not always demonstrate statistical significance in the context of quality healthcare. Several factors contribute to the complexity of health systems, rendering the workforce's impact on outcomes challenging to isolate and quantify. Although the competence and size of the workforce are undeniably crucial, they exist within a network of unified factors, such as access to care, socio-economic factors, and patient compliance. Disentangling the individual contribution of the workforce from these confounding variables can be challenging. In addition, the definition of "adequate and capable" workforce is subjective and context-dependent. Adequacy and capability can be influenced by factors such as training, experience, specialization or fluctuations and unpredictability's of patient care needs (van der Mark et al., 2022). Statistical analyses rely on exact defined variables, and the lack of a universally accepted standard for workforce adequacy makes it challenging to conduct consistent and comparable studies across different healthcare settings.

Moreover, healthcare systems are ever changing and progressing over time in response to various internal and external factors. Workforce adequacy and capability can be affected by

policy changes, technological advancements, and shifts in patient demographics. Attempting to establish a direct link between the workforce and health outcomes may struggle to account for these influences, leading to results that lack generalizability and predictive power. Additionally, the outcome measures used in healthcare research are diverse and can encompass a wide range of indicators, from mortality rates to patient satisfaction. The impact of the workforce on different outcome measures may vary, and statistical analyses must consider this heterogeneity. The intricate nature of healthcare systems, the presence of confounding variables, subjective definitions of workforce adequacy, dynamic healthcare environments, and diverse outcome measures collectively contribute to the challenge of demonstrating statistical significance. Future research should strive for methodological rigor, considering these complexities to provide deeper insights into the true impact of the health workers adequacy.

Generally, patient satisfaction surveys administered post-hospital visits and the availability of sufficient supplies of the right medications are significant outcome predictors in quality healthcare (Perneger et al, 2020). This reveal the associations between high patient satisfaction, improved adherence to treatment plans, and better health outcomes. Likewise, the significance of medication supply is rooted in its direct impact on disease management, prevention of complications and entire patient well-being. Thus, assessment of patient care can be conducted through the health outcomes. This will reveal the level of attention given to patient, how their changing needs were met and the likelihood of oversight in staffing strategies. Frequently linked outcome measure to patient safety can be hospital-acquired infections, medical errors, health status and function, often associated with insufficient staffing techniques. However, monitoring health outcomes provides tangible quality benchmarks, enabling health facilities to modify organizational structure and process, as both plays significant role on the outcome. This understanding will contribute to the ongoing efforts to enhance the quality, effectiveness and patient-centeredness of healthcare services. Ultimately,

will lead to better clinical outcomes, enhance patient and staff satisfaction, and reduce costs and mortality.

Summary of Findings

The discussion in this section following the evaluation of generated information on human resource management practices including recruitment, reward system, teamwork, training and development and quality of healthcare including the structure, process and outcome revealed some interesting findings. The results revealed relationship between effective HRM practices and quality healthcare in relation to existing theories and prior studies. The study restates the theory of Herzberg's two- factor theory of motivation and Donabedian quality of care model.

Recruitment is one of the major role of human resource management practices that deals with selecting and hiring of employees. Global recognition of the significance of workforces as the greatest asset in attainment of organizational goals has long been established. The awareness of paradigm changes from finances to human resource as key drivers of quality and profitability necessitated the desperate hunt for skilled and experienced workforces. From the study, recruitment as a predictor of quality care were statistically significant thereby strengthening other previous studies on the key role of recruitment in healthcare quality (Norskov et al, 2022). Health stakeholders in Nigeria will need to make conscious effort to enhance quality of care in the country by ensuring that professionals with right skills and skill-mix are hired. The era of corruption, favoritism and other vices should be erased and new age of innovative recruitment based on merit needs to begin for the required change in quality of healthcare in Nigeria to become a reality.

On reward system, although marginally significant in this study, yet the importance of reward over the years has been recognized. Reward is a multifaceted concept because of its subjective nature and other ideologies, these factors largely determine individual perception

regarding reward and the components of a good reward system. Despite, this view every individual requires one form of reward or the other because of its vital role as an exchange for getting or providing basic needs (Hee, et al, 2016). However, the study finding revealed that in the Nigerian context, healthcare workers expressed significant interest for intrinsic rewards above extrinsic reward as the motivator for actualizing their organizational set goals and improving quality of care. Hence, the suggestion for the practitioners and other stakeholders in health to aim for a balance in the reward system (extrinsic and intrinsic reward), with greater emphasis on intrinsic reward.

Teamwork plays a significant role on quality care service by influencing health outcome positively. Meaningful contributions by different skill mix enhances operational efficiencies particularly in healthcare where a patient's care treatment plan and outcome must be reviewed and determined by various specialists. Thus, the multidisciplinary approach to care practices, which is holistic in nature, makes teamwork a critical element for achieving good and expected health outcome (Aaberg et al, 2019). This study is similar and comparable to existing studies and reaffirms the strong impact and overwhelming benefit of teamwork in patient health outcome. The study proposes that healthcare industries, health educational institutions and other stakeholders should incorporate teamwork in the curriculum of healthcare workers and on various on-the-job trainings, seminars and workshops. This is expected to notably improve quality of healthcare in Nigeria.

Similarly, training and development has been recognized as a major driver of quality care because knowledgeable and skilled staff equipped with the necessary information add meaningful value to an organization performance, quality, productivity and profitability. According to the motivation and hygiene component of Herzberg's two -factor theory, an organizational investment on the workforce training or professional development promotes high level of job satisfaction leading to better quality services and higher staff retention. Thus

the strong benefit of investing on healthcare professionals training and development in order to improve quality of care, reduction on the rate of medical errors, mortality, staff dissatisfaction and turnover. As recognized from this study finding, investing in the workforce on- the- job- training and development will equip the employees with current and innovative knowledge for evidence –based services. This will facilitate better care service delivery, boost staff morale and willingness to go extra mile for an organization bearing in mind the institution appreciates and values them and thereby commit funding for their career progression. This supports the recommendation on continuous training for Nigerian healthcare workforce in order to improve knowledge, quality delivery and minimize high staff turnover and migration (Oladele et al, 2023).

Furthermore, components of quality such as structure, process and outcome as illustrated on Donabedian model of quality care are the determinants of quality care. They follow a sequential link or chain and a break in one element affects the general health outcome. Structure, a component of quality care from Donabedian model of quality care influences both the strategic management decisions and the development of policies that guide healthcare delivery.

In conclusion, the complex nature of healthcare necessitates the importance of measured variables in service delivery as each contributes significantly to each sub construct ability to promote care quality. This analysis indicates that certain HRMP, particularly teamwork, recruitment and training and development efforts, play significant roles in enhancing specific aspects of healthcare quality. These findings provide valuable guidance for health organizations aiming to improve the quality of care service delivery by focusing on targeted HRMP strategies. However, despite the fact that reward system fell at the range of less than < 0.5 acceptable loading, the variable cannot be overlooked because it plays a crucial role in promoting employee's motivation, a form of interchange for the services staff rendered to

the organization. Rather, reward systems, might require further exploration or consideration of additional variables such as culture or a qualitative approach to have a comprehensive understanding of its impact on healthcare quality with focus on different individual perception. The importance of reward system as a crucial tool for employee motivation necessitates the need for a recognized, balanced and appropriate compensation system in health sectors.

CHAPTER FIVE: IMPLICATIONS, RECOMMENDATIONS, AND CONCLUSIONS

Introduction

All over the world, healthcare institutions endeavours to deliver quality healthcare services because that is the key aim of health system. However, ability to deliver high quality care services has been challenging for many countries as they are still confronted with health system related problems predominately in low income or developing nations. African healthcare system has been going through turbulent phase and some of these issues are associated with economic, political, institutional and human resources (Oleribe et al, 2019). In Nigeria, the increased outcry of the masses over poor quality healthcare has been an enduring concern. Several attempts and initiatives has been put in place by government, non-governmental bodies, organizations, and healthcare stakeholders to address the problem but have not witnessed significant progress.

Healthcare is not cheap especially, fee for service that requires out of pocket payment, mainly accessible at private health sectors. The affluent often access healthcare from private hospitals or sometimes travel to the developed countries to meet their health needs leading to spending of millions of dollars in medical tourism (Shehu, 2019). Whereas, the average member of the public continue to search for affordable and accessible healthcare that will meet their health needs with positive health outcome. Thus, the poor masses who cannot afford the high cost of healthcare relies on tradomedical or self-treatment leading to increased mortality and morbidity with a resultant high global burden of diseases such as malaria and HIV/ AIDS (Tambe, 2019; WHO, 2018). Consequently, there is an ongoing need to strengthen and improve the deteriorated health system. Although, several studies stressed that Nigerian health issues are related to bad leadership, dilapidated infrastructures, poor funding, out- of- dated equipment, poor salary and many others (Lawal & Criroma, 2020). Notwithstanding the above-

mentioned attributed factors, consideration should be given to human resource due to its vital role.

To worsen the healthcare situation in Nigeria, there had been constant migration of skilled health professionals from this country to other nations. A review of literature highlighted the incessant mass exodus of Nigeria health workforce to the Western world, associated with poor working condition and unconducive work environment among others leading to acute shortages (Lawal & Criroma, 2020; Muanya & Onyedika-Ugoeze, 2020). According to (Muanya & Onyedika-Ugoeze, 2020) Federal Ministry of Health (FMOH) reported that only 55, 000 medical doctors are practicing in the country out of 90,000 medical doctors registered with the Medical and Dental Council of Nigeria. In addition, Adejoro (2023) recently revealed that the number of practicing Nigerian doctors in United Kingdom has sharply risen from 7, 875 to 11,000. Similarly, increased number of Nigerian practicing doctors and nurses are witnessed across other developed nations of the world leading to acute shortage of health professionals in the country (Chiedozie, 2021). The incessant "brain drain" has severe negative effect on quality care services due to work overload, burnouts, demotivation, low job satisfaction, absenteeism, high turnover and ultimately low performance and poor quality healthcare (Blstakova & Palencarova, 2021).

The unique and significant role health workers play in quality healthcare attainment has been established (Aranha & Venkateswaran, 2020; WHO, 2015). In addition, Habotoor et al (2016) underscored HRM practices as a critical aspect of managing people, supporting and improving quality, higher performance and competitive advantage. Health workforce shortage has been a global challenge but the continuous emigration of Nigerian health workers has led to dangerous shortage of doctors and nurses in the country leading to national embarrassment. Thus, the critical need to focus on human resource with an intention to recognize and establish an approach that will motivate health workers, improve job satisfaction, retention, performance

and quality care services. Recently, report from health committee in Lagos state reported the life- threatening situation of health personnel's shortages in the country resulting to shutting down of about five wards consisting of 150 beds in Lagos University Teaching Hospital (Ojuroungbe, 2023). It is in view of the above with the associated poor quality healthcare that this study was informed.

Previous studies investigated poor quality care in Nigeria from the angle of funding, leadership, poor salary, dilapidated structures and others with little or no attention to understanding what motivates the health personnel's who are the backbone to the delivery of quality care. Several scholars (Mohamed & Hameed, 2015; Zaiter et al, 2021) emphasized that human resource concern has not received needed attention in Nigerian health system as one of the major area of focus for revival of the worsened health system. It is against this background that the study evaluates the influence of human resource management practices on quality healthcare in Nigeria. In a country with various healthcare challenges, understanding how human resource management practices (HRMPs) influence the delivery of healthcare services is crucial for improving the quality of care. Therefore, the study aims to provide insight on the relationship between HRM practices and quality health care services, specific practices and techniques required to support, motivate and equip the workforces for proper implementation, success and sustenance of quality healthcare delivery.

For this investigation, a quantitative research approach was adopted with the use of structured questionnaires distributed to 385 participants who are healthcare workers in Lagos State. Descriptive analysis was employed and structural equation modeling, a broad statistics method to determine the association between the two variables under study. A total of 357 correctly completed questionnaires was retrieved and analyzed using structural equation modelling, specifically partial least square SEM (PLS- SEM). PLS- SEM was selected due to lack of normal distribution of the generated data making it an ideal method in addition to its

predictive nature since, the aim of the study is to predict. Thus, hypotheses were tested and their predictability evaluated through PLS- SEM and the associations between the constructs and indicators evaluated using a composite model process (Yildiz & Kelleci, 2023). The rationale for using PLS-SEM lies in its ability to predict outcomes, flexible, non-normally distributed data, and its ability to handle complex models and various types of measurement structures. Furthermore, the established guidelines and rules on ethical research conduct were adhered to throughout the research process. Prior to data collection, ethical approval was received from UNICAF ethical guideline (UREC) and the hospital of study Health Research and Ethical Committee.

The findings presented have significant implications for hospital management and policy development. The identified relationship between HRMPs and QHC carries both practical and strategic implications for healthcare institutions. The implications are crucial for various stakeholders, including health organizations, government, non-governmental, management, health professionals, policymakers and others. The implications are derived to provide answers to five research questions established in chapter 1 of this study. Specifically, this section provides detailed discussion on the implications in terms of response to the study problem, its appropriateness, significance, limitations, alignment with theoretical framework and contribution to current knowledge. Second, is the study suggestion for application, third, is proposal for future study followed by the conclusion.

Implications

In an attempt to bring about reformation in healthcare quality in Nigeria, focus should be on the health professionals, the key drivers of quality service delivery. Jaeger et al (2018) demonstrated that efforts to improve quality often leads to enhancement of staff motivation hence, the importance of evaluating quality healthcare from employee perspectives. This

approach helps to provide meaningful insight, encourage and support workforces towards higher performance.

The management, policy makers and other healthcare stakeholders can be informed through this study on the contribution of human resource management practices (HRMPs) on quality care attainment. The results suggest that HRMPs contribute to the 21% of quality healthcare delivery. On further analysis, each studied variable were tested to ascertain the percentage significance of each to quality care. This will guide policy makers and management to determine the key areas to channel resources or concentrate on. They can use the findings to define sets of policies around recruitment, reward system, teamwork, training and development.

Research Question (RQ) 1: What is the relationship between human resource management and quality healthcare? (HRMP->QHC)

The findings of the study revealed that human resource management practices (HRMP) account for 21% of the variability in quality of healthcare (QHC), and that has significant implications for hospital management and policy development. This is corroborated in previous studies that there is a positive influence of human resource management practices to healthcare quality services through staff performance enhancement (Zaiter et al, 2021).

The findings revealed that higher outer loadings were recorded for questions relating to the concern for patients, particularly in addressing their questions and worries, as well as in the effective and timely handling of complaints. Clear communication of health information with patients and families was also strongly emphasized, supporting informed decision-making regarding care. Furthermore, the results indicated that patients were adequately prepared for discharge through structured processes, while the ward environment provided sufficient space to ensure safe care activities and reduce risks of harm. These findings underscore the importance of patient-centered communication, effective complaint management, and safe care

environments in promoting quality of healthcare, highlighting vital areas necessary for sustaining and improving healthcare delivery practices.

Therefore, hospital management should prioritize and strategically invest in HRMP to enhance healthcare quality. This includes improving recruitment processes with policies that support fair salaries, on boarding, teamwork and professional development (Zaiter et al, 2021). As well as providing effective training, promoting a positive work environment, and implementing retention strategies. In addition, policymakers and hospital management may need to reconsider resource allocation. Allocating resources to initiatives that strengthen human resource capabilities becomes essential for achieving and sustaining high-quality healthcare. This may involve budgetary adjustments to support training programs, staff development, and employee well-being initiatives. Policies that emphasize and acknowledge the role of human capital in quality care delivery, and inclusion of human resource indicators in quality assessment frameworks to guide hospitals in measuring the impact of their human resource practices.

Another implication is staffing and skill mix, appropriate training, and retention of qualified personnel's; these can contribute directly to the delivery of quality care. Okoroafor (2023) specified unavailability or inadequate number of skilled health workers as one of the major challenge confronting quality care and safety in Nigeria. Adequate number of health workers such as nurse-to-patient ratios or doctor- patient- ratio are linked to improved patient outcomes and safety (Dzakula et al., 2022). For example, in Nigeria, the current nurse- patient –ration is 1:588 patients to one nurse contrary, to the Organization for Economic Cooperation and Development (OECD) suggested average of one nurse to 114 patients. While, the OCED recommended average for doctor –patient- ratio is 270 patients to a doctor but presently, a doctor- patient- ratio is one doctor to about 2,500 patients (Olufemi, 2023). Excessive workload leads to burnouts and thus, negatively affect performances, increased job turnover, medical

errors, jeopardize patient's safety and leads to poor quality of care (Izdebski et al, 2023). Hospital management and policymakers should implement the identified HRMP strategically to enhance recruitment, to ensure attraction and retention of right and competent staff, support trainings and other practices to promote quality and safety of the patients.

Next is employee engagement and job satisfaction, both of which are crucial for maintaining quality healthcare services. Satisfied and committed professionals are more likely to provide patient-centered care, communicate effectively, and collaborate with colleagues. Studies has established that work engagement reduces turnover intention, increases job satisfaction and promotes better quality care services (Szilvassy & Sirok, 2022).

Additional implication is open communication channels and a collaborative culture, which are vital for effective care coordination and patient safety. There is need for development of policies that promote a culture of transparency, teamwork, and shared decision-making, this will contribute to an environment where errors are minimized.

RQ2: What is the link between recruitment and quality healthcare? (HRMP- RC-> QHC)

The findings shown that the recruitment dimension of human resource management practices (HRMP- RC) account for an R-squared value of 13.7% in quality of healthcare (QHC). From the findings, higher outer loadings of QHC (>0.5) were recorded for questions relating to patient satisfaction with the care received, as reflected in the survey administered after hospital visits. The results further emphasized that an adequate and capable workforce contributes to improved health outcomes, and the sufficient supply of appropriate medications supports patient recovery. Notably, while patients expressed concerns about long waiting times, the availability of nurse call bells was highlighted as a positive factor, enabling nurses to respond promptly to patient needs. These findings suggest that while general satisfaction with care is high, addressing waiting time challenges could further reinforce patient

experiences and outcomes. It is therefore, important to recruit health care professionals that have humane qualities such as empathy, kindness, patience and others.

Therefore, the link between recruitment and quality healthcare is a critical element that significantly influences hospital management and policy development. In the complex and dynamic healthcare environment, recruitment of skilled and motivated workforce is utmost to ensuring the delivery of high-quality patient care (Akinwale & George, 2022; Chams & Garcia-Blandon, 2019).

There should be development of recruitment policies to address workforce shortages, competent personnel, diversity, distribution discrepancies, stability and retention strategies. The policies that relate to education and training, incentives, and measures to attract and retain talent are essential in creating a strong workforce. A well- and structured recruitment policy will guide health organizations and management against recruitment based on corrupt practices and prejudices (Norskov et al., 2022). Furthermore, the link between recruitment and quality healthcare has implications for resource allocation within hospitals. Allocating proportionate resources both financial and non- financial ensures recruitment of adequate number of qualified personnel, which affects patient-staff ratios and this in turn, influences the level of care provided to each patient (Barnicot et al, 2020). Therefore, hospital management must strike a balance between cost-effective staffing models and maintaining of sufficient personnel to meet patient needs, thus directing the delicate equilibrium between financial sustainability and quality healthcare provision.

The technological advancements and changing demographics, demands a proactive approach to recruitment and policy development. Hospital management must be forward thinking in anticipating future healthcare trends and adapting recruitment strategies accordingly. Policies should be swift to accommodate changes in healthcare environment, ensuring that the workforce remains flexible and equipped to meet emerging challenges.

Competent and well-trained professionals, including doctors, nurses, and allied staff, contribute to the effectiveness of medical interventions and patient outcomes. Hospitals must adopt strategic recruitment practices to attract individuals with the requisite skills, experience, and dedication to uphold and enhance the quality of care (Barnicot et al, 2020). Furthermore, recruitment and quality healthcare has implications for patient satisfaction and the hospital reputation. Patients often evaluate the quality of their experience based on interactions with the health workers. A well-recruited and motivated staff contributes to positive patient experiences, leading to improved patient satisfaction scores and strengthening of the hospital's reputation. Good recruitment practices contribute to the stability of the workforce by selecting candidates who are a good fit for the organizational culture and values. This, in turn, can reduce turnover rates and promote staff retention.

Hospital management must ensure that strategic recruitment practices align with the formulated policies to hire skilled and diverse workforce. This approach enhances the delivery of quality patient care and contributes to effective resource allocation, collaborative teamwork, and the success and reputation of the health institution. Policy makers and hospital management must continually assess and adjust the strategies to meet the changing demands of patients and healthcare. Strategic and ethical recruitment practices contribute to the establishment of a skilled, diverse, and motivated healthcare workforce, laying the foundation for policies and practices for quality patient care.

RQ3: What is the connection between the reward system and quality healthcare? (HRMP-RW-> QHC)

The result illustrated that human resource management practice: reward system (HRMP- RW) account for R- squared value of 16.6% in quality healthcare (QHC). Under this research question, from the findings, higher outer loadings >0.5, were recorded for questions relating to patient satisfaction with the care received, as captured through post-hospital visit

surveys. The results further indicated that patients consistently reported high satisfaction with the quality of care, while the presence of an adequate and skilled worker was strongly associated with improved health outcomes. These findings highlight the central role of skillful healthcare personnel in delivering quality care and sustaining patient satisfaction, underscoring the importance reward system on workforce capacity in achieving positive health outcomes.

However, when tested on each of the three components of quality care model, it was noted to be marginally significant with quality structure but non- significant with process and outcome. Analyzing this relationship between reward system and quality healthcare has great implications for hospital management and policy development. Reward system is a process, for recognizing and compensating the workforces for their contributions, high performances and achievements (Francis et al, 2020). When reward system is in line with the institution goals of providing quality, the impact affects different aspects of management and the policies. Although, Agbenyegah (2019) argued that extrinsic reward, is a more influential motivator to regulate the employees work behaviours leading to efficiency and effectiveness than motivation using any other reward system.

Nevertheless, the findings of this current study confirmed literature (Hee et al, 2016) on the importance of intrinsic reward motivation in enhancing the job performance of nurses. The implication is for hospital management to equilibrate intrinsic and extrinsic recompenses with greater emphasis to intrinsic reward. This implies that in addition to extrinsic reward management should acknowledge exceptional performances with praises, congratulatory messages, plaques or certificates of appreciations. Colvin et al (2021) proposed that management and relevant stakeholders should focus on intrinsic reward as a means to improve health professional motivation and dedication for high quality care and organizational progress. Hee et al (2016) further highlighted that these components of a reward system can influence staff decisions to join and stay with an organization. Thus, a fair reward system that recognizes

and acknowledges the contributions of staff can contribute to increased job satisfaction and staff retention. Since, quality healthcare often depends on a stable and experienced workforce, attracting and retaining skilled professionals through a rewarding work environment can help to maintain a consistent level of expertise in the delivery of care services (Ameh et al, 2017).

In addition, effective reward system supports the management efforts to drive quality improvement and meet regulatory standards. Quality is often measured against established standards and guidelines. A reward system that recognizes and emphasizes on adherence to these standards assists in creating a culture of continuous improvement. By linking rewards to the achievement of quality metrics, management can motivate health workers to participate in initiatives aimed at enhancing patient safety, error reduction, and quality care improvement (Young & Smith, 2022). It also contributes to the development of a culture of excellence, a sense of pride and commitment among health personnel. This positive culture infiltrates the organization, becomes a norm, influences all staff; improve collaboration, and a collective commitment to quality care services.

The implications for policy development requires policy makers to consider the role of incentives and recognition in healthcare services. Policies that support the implementation of effective reward systems can influence and motivate staff, encourage them to excel in their role, leading to improved performance, commitment to quality care, adherence to safety protocols, innovative practices and a culture of continuous improvement. Since quality relies on the dedication and competence of staff, rewarding excellence in patient care, encourages the workforce to become high performers and to provide patient centered care (Niguse & Getachew, 2019).

Patient satisfaction as a key indicator of quality care is influenced by reward system through its vital role in modifying staff behaviours which, ultimately impact patient health outcome and experience. When rewards are linked to patient-centered care, effective

communication, and empathy, health workers are motivated and encouraged to deliver care that meet the needs and preferences of patients. The implication is that the management benefits from improved patient satisfaction scores, which can positively affect the organization reputation, financial performance, profitability, staff motivation and satisfaction (Agbenyegah, 2019; Richter & Muhlestein, 2017). This can enhance financial sustainability of the health organizations thus; a financially sustainable organization can invest in technology, staff development, and infrastructure, all of which are essential for delivering and maintaining quality healthcare services.

Generally, through recognition and rewarding of excellence in patient care, organizations can create a positive and motivating work environment, attract and retain skilled workforces, and drive continuous improvement in quality. Policy makers and management must consider the importance of ensuring that incentives are connected to quality objectives to promote a health system where positive patient outcomes and experiences is a priority. The effective integration of a reward system into healthcare management practices can ultimately lead to a culture of excellence that benefits both the employees and the patients (Richter & Muhlestein, 2017).

Although, reward system was not statistically significant to quality healthcare, it could be that the measurement tools failed to address the question appropriately or it could be that reward does not directly influence quality healthcare however, the vital role as a motivator for employees cannot be overemphasized. Considering the aforementioned, it is crucial for hospital management and policy makers to have an in-depth knowledge of the elements that influences staff work behaviour. The aim is to concentrate on the suitable remedial actions and to implement right strategies that will facilitate constant improvement. Therefore, there is need for further research on reward system in order to have a better understanding of the significance of reward on quality healthcare.

RQ4: What is the relationship between teamwork and quality healthcare? (HRMP- TW-> QHC)

There is a strong interaction between teamwork and quality healthcare in achieving optimum patient outcomes in addition to determining the management and policy development. There relationship is positive and significant with a high R-squared value of 20%. From the findings, the teamwork aspect of human resource practice was found to predict quality healthcare, with higher outer loadings (>0.5) recorded for questions relating to patient satisfaction and workforce capacity. Specifically, patient satisfaction surveys administered after hospital visits consistently reported high levels of satisfaction with care received. In addition, the presence of an adequate and capable workforce was associated with improved health outcomes, while the sufficient supply of appropriate medications was shown to promote patient recovery. These findings underscore the significance of teamwork-oriented human resource practices in strengthening healthcare delivery, ensuring both patient satisfaction and positive clinical outcomes.

Thus, the effectiveness of collaborative efforts among healthcare workers influences quality patient care, and this connection has insightful implications across several angles of hospital management and policy formulation. Examination of teamwork on individual quality components revealed high positive statistical significance with quality outcome while, structure and process was not significant.

Teamwork in healthcare is a cornerstone of patient-centred care. The collaborative interaction among doctors, nurses, pharmacists, laboratory scientist, dietician, and others contributes to a holistic and integrated approach to healthcare delivery (Aaberg et al, 2019). Hospital management must uphold a collaborative culture, promote effective communication and shared decision-making among team members because this will improve patient outcome and experiences and enhance the efficiency and effectiveness of services Strategic focus is

required for building and promoting cohesive teams. Leaders must recognize the importance of team dynamics, promote a culture of mutual respect and open communication, and address barriers that can hinder effective collaboration. Hence, the need to invest in team building activities, training programs, and developing a sense of shared purpose can lead to a more unified and high performing team, ultimately uplifting the quality of patient care (Joubert & Reid, 2023).

Teamwork and quality healthcare has implications for resource utilization. A coordinated team can enhance the use of resources, reduce redundancy, and streamline processes. Hospital administrators need to consider team-based approaches when allocating staffing, equipment, and other resources to ensure that the team functions as an interrelated unit, maximizing efficiency and minimizing waste (Barnicot et al, 2020; Alshehri et al, 2023). This strategic resource management is vital for maintaining a balance between cost effectiveness and the delivery of quality care.

Furthermore, teamwork plays a key role in patient safety. Effective communication and collaboration among the workforces are essential for preventing errors, identifying potential risks, responding promptly to adverse events and promoting patient satisfaction (Chen & Gong, 2022). Management must strengthen patient safety initiatives and implement policies that encourage a culture of transparency and shared responsibility. This includes regular team training on safety protocols, incident reporting mechanisms, and continuous quality improvement practices.

The implications of teamwork and quality healthcare extend to policy development within health institutions. Lawmakers should formulate policies that support collaborative practices such as interdisciplinary training and team based care models using TeamSTEPPS (Team Strategies and Tools to Enhance Performance and Patient safety) for collaborative achievements (Khoshnoodifar et al., 2024). Management and policy makers should work

towards creating an organizational framework that support and rewards effective teamwork. A lesson from the life of ants revealed the impact of working together harmoniously to accomplish greater goals.

Additionally, policy formulation should consider the integration of technology to facilitate communication and collaboration among healthcare teams. Electronic health records and other technological tools can enhance the coordination of care, providing immediate information that supports informed decision-making and continuity of care (Uslu & Stausberg, 2021).

RQ5: What is the association between training and development and quality healthcare? (HRMP- T& D -> QHC)

Training and development has statistically significant relationship with quality healthcare with an R²- squared value of 10.5%. HRMP- T& D has significant relationship with quality process and not significant with quality structure and outcome. This association has important implications that affects various aspects of hospital management and policy formulation. On the training and development dimension of human resource practice, the findings showed higher outer loadings (>0.5) for indicators of quality healthcare (QHC) relating to patient satisfaction and workforce competence. Specifically, patient satisfaction surveys administered after hospital visits reported high satisfaction with care received, reflecting the positive impact of staff training on service delivery. The adequacy and proficiency of the workforce were also associated to improved health outcomes, demonstrating the contribution of training and development in improving staff performance. Similarly, the sufficient supply of appropriate medications was linked with patient recovery, further accentuating effective resource management supported by trained personnel. However, patient complaints about long waiting times highlighted a gap, suggesting the need for targeted training in workflow efficiency and patient flow management. Generally, the findings suggest that

training and development play an important role in improving patient satisfaction, health outcomes, and service efficiency.

Continuous education and skill enhancement of health professionals are key to ensuring the delivery of quality patient care and effectiveness of health systems. T& D has significant implications for patient safety and requires management investment on training programs to ensure that the employees are equipped with adequate knowledge and skills necessary to provide innovative and evidence-based care (Gil-Lacruz et al., 2019). Trained professionals are better prepared to manage complex medical situations, and are more likely to follow established protocols and safety measures, make informed decisions, and mitigate potential risks (Okoroafor et al, 2022). On-going training on safety protocols, new technologies, and emergency response procedures is essential for reduction in medical errors and adverse events. Hospital management should enforce training initiatives that impact patient safety, recognizing that a well-equipped workforce is required for quality healthcare services. Continuous education maintains and enhance staff competence, enables them to acquire new skills, enhance existing competencies, well informed of the latest medical advancements, technologies, and best practices (Gil-Lacruz et al., 2019). This commitment to ongoing education is vital in a constant changing healthcare setting, where being conversant with the current knowledge in medicine is synonymous with providing quality services.

Policies related to workforce development, continuing education requirements, and professional certifications must harmonize with the goal of maintaining high quality care. The management, in collaboration with policy makers, need to develop and implement policies that mandate ongoing training, making it integral to the organizational framework. Policy development should oversee integration of technological advancements in healthcare. Advancement in medical technology necessitates that staff must receive training on effective utilization of new tools and systems (Martin & Sundararajan, 2023). Policies should outline

strategies for incorporating technological training into ongoing professional development, ensuring that healthcare providers remain proficient at using modern innovations for improved patient care.

Effective hospital management involves creating a culture of learning and development within the organization. The administrators must foster an environment that encourages health professionals to pursue continuous education and skill enhancement. This contributes to professional progression and enhances the competency of the staff. Providing opportunities for training and development demonstrates an organization investment in staff growth, leading to increased job satisfaction and motivation. Engaged and motivated staff are more likely to contribute positively and improve performance, impacting on the quality of care services rendered (Gil-Lacruz et al., 2019). Hospital leaders should recognize training and development as strategic investments in the long-term success and sustainability of the institution.

Training programs extend beyond clinical skills to include leadership and management training as every professional is expected to develop leadership skill in the provision of care (Ali et al., 2019). Have the ability to understand the complexities of healthcare policy, aware of the regulations, standards, and procedures, management and ensuring the implementation of policies regarding patient outcomes and safety. It keeps professionals updated on regulatory requirements and compliance standards. Quality healthcare policies are more likely to have successful implementation when staff possess the necessary training and skills to understand and follow them. This is crucial for hospital management to avoid legal issues and maintain accreditation.

Management must recognize the strategic importance of investing in the continuous education and skill enhancement for the workforce. A commitment to ongoing training improves the proficiency of employees and contributes to a culture of learning and innovation within the organization (Willie, 2023). Policies should be formulated to support and reinforce

the link between training and quality healthcare, addressing workforce development, patient safety, and the integration of emerging technologies. This holistic approach particularly changing technology ensures that hospitals are well positioned to adapt to the changing healthcare environment and provide the highest standards of care to the patients and entire communities (Konttila et al., 2019).

Conclusively, adequate understanding of the impact of HRM practices may help various health stakeholders and policy makers to identify strategies that will enhance employee satisfaction, productivity, quality care delivery and staff retention. Some of the approaches are investment on employees, training program and initiatives, modification of recruitment and retention practices. In addition, this study provoked further research and continuous improvement in the field of human resource management within the health system. Special consideration may be given to educational institutions for health professionals for possible adjustment of their curricula based on the findings. Incorporating insights from this study to health educational programs can potentially prepare students for the realities of the health human resource practices. The purpose is to ensure future health workers are equipped with the skills and knowledge needed to succeed in health environments with effective human resource practices.

Recommendations for Application

In the quest for improved healthcare quality in Nigeria, it is imperative to recognize the key role of human resource management practices (HRMPs). The effectiveness of healthcare services is intricately linked to the competence, motivation, and overall management of healthcare professionals. This recommendation outlines a comprehensive approach to evaluating the impact of the practices on healthcare quality in Nigeria, considering the unique challenges and opportunities within the country. These multifaceted challenges, ranges from inadequate infrastructure to a shortage of skilled healthcare professionals (Akinwale & George,

2022). Addressing these issues requires a strategic focus on human resource management practices, as quality of healthcare is fundamentally tied to the capabilities and satisfaction of the workforce. The aim is to create an environment that promotes continuous improvement in healthcare delivery. Thus, based on the findings there is need for organizations and policy maker to consider these recommendations:

Planning and Recruitment of Health Personnel: Effective human resource management begins with strategic planning for the health workers. In Nigeria, there is need for a meticulous analysis of the health workforce requirements across various areas such as the primary, secondary and tertiary health sectors. This includes assessing the current and future demand for different professionals, such as doctors, nurses, pharmacist and others. Recruitment strategies should attract and retain diverse and highly skilled professionals, identify existing gaps and consider factors such as cultural competence, empathy, and patient-centered care when evaluating potential candidates (Kushemererwa et al, 2020). Furthermore, a strategy to promote staff retention requires greater emphasis on onboarding and mentorship program to adequately support new hires and new graduates to workplace environment (De Vries et al., 2023; Koneri et al., 2021).

Training and Development: There is critical need to invest in continuous development of healthcare professionals in order to enhance healthcare quality. A structured training and development program should be designed to incorporate both technical skills and soft skills such as communication, empathy and others (Moudatsou et al, 2020). The aim is to ensure health workers are equipped with the necessary skills, knowledge, and competencies for quality patient care (Okoroafor et al, 2022). Integrate ongoing training opportunities to keep them updated on the latest medical and technological advancements, and evidence-based practices. Furthermore, collaboration with academic institutions and international partners can contribute to the design and implementation of relevant training programs.

Effective Communication and Collaboration: The significance of seamless collaboration and effective communication among health personnel in quality care attainment has been recognized (Zajac et al., 2021). Hospital management and stakeholders should focus on encouraging open communication channels, interdisciplinary training, and collaborative decision-making processes and teamwork. Implement team-building activities and initiatives to strengthen interpersonal relationships and improve collaboration (Aaberg et al., 2019). Adoption of these approaches ensures that healthcare team's function cohesively leading to improved patient outcomes.

Performance Management and Appraisal: Establish a system for regular evaluation of teamwork, training, recruitment, and reward strategies to identify areas for improvement in line with organization goals and quality standards. Conduct regular appraisals to provide opportunities for feedback, recognition, targeted interventions for improvement and areas for training and development (Muriuki & Wanyoike, 2021). Enhance this process by incorporating patient feedback, staff feedback and outcome-based measures to existing strategies and policies.

Workforce Diversity and Inclusion: A diverse and inclusive healthcare workforce is essential for meeting the diverse health needs of the society and are recognized to improve staff innovation and organizational performances (Liu et al, 2023). Human resource management practices should concentrate on promoting diversity and inclusivity in hiring, training and career advancement. This support management of social equity concerns and also contributes to a more culturally competent healthcare system, better patient outcome, employee benefits and the overall quality of care (Hammond et al., 2022).

Incentive Structures and Recognition: Development of effective incentive structures is crucial for retaining and motivating health workers. Hence, the need to establish a reward system that recognizes and supports work behaviours related with quality healthcare, such as

adherence to standards, innovation, and patient satisfaction (Cotton et al, 2022). Incentives could be financial but more of intrinsic rewards like career advancement opportunities and recognition program is for outstanding contributions with an intent to motivate and promote a positive lasting work behaviour (Manzoor et al, 2021). In addition, incentives should be modified to address specific challenges, such as rural healthcare service provision in order to help in equitable distribution of healthcare resources.

Employee Engagement and Motivation: High quality healthcare outcomes, patient satisfaction, staff job satisfaction and organizational growth are associated with committed and motivated workforce (Ogbeivor & Ogbeivor, 2021). In addition, effective onboarding will enhance engagement and retention (Murgoski, 2023). Therefore, recognition and rewarding of exceptional performance and creating of a strong feedback mechanism can contribute to increased motivation among health personnel. Initiatives such as employee wellness programs and mentorship opportunities can further enhance job satisfaction and general well-being. In addition, a conducive work environment with desired worklife balance will go a long way in fostering staff job satisfaction leading to improved performance and efficiency in service delivery.

Technology Integration: Human resource management should incorporate technology into the practices to help restructure administrative processes, facilitate communication and promote staff training on teamwork (Khoshnoodifar et al, 2024). Adopting technological innovation such as electronic health records, workforce management systems and telemedicine solutions can improve efficiency; contribute to patient safety, positive health outcomes, and quality of healthcare services. Provide training and support for professionals to effectively utilize new technologies and stay updated on current advancements (Wahdaniah et al., 2023). However, consideration should be placed on the impact of integration on the workers to ensure

a smooth transition (Elkordy & Iovinelli, 2021) therefore; training should be tailored to each individual need based on their specific role (Anwar & Graham, 2021).

Research and Continuous Improvement: To promote a culture of research and continuous improvement is vital in order to be well-informed of the changing healthcare practices. HRM should develop a culture that encourage staff to be innovative, flexible and engage in exploration activities, attend conferences and participate in professional development opportunities (Wahdaniah et al, 2023). Supportive work environment will enhance staff value and create willingness for successful change. Ultimately, the workforce will be equipped with the latest knowledge and skills for continuous quality service delivery. In addition, fortify staff with an understanding of non-punitive approaches to quality improvement, a just culture and clinical governance embedded on training, guidance, auditing, research and development and continuing learning attitude (Alenezi et al, 2022; Paradiso, 2019). Furthermore, implement feedback loops to obtain insights from health staff, patients, and other stakeholders to identify areas for quality improvement.

Regulatory Compliance and Ethical Considerations: Adherence to regulatory standards and ethical considerations is paramount in healthcare. These cover various quality related aspects of care services such as governance, training, practices, staffing/qualifications (Dunbar et al., 2021). Thus, the need to formulate and update policies in line with established quality standard and, regulatory requirements. Involve healthcare professionals in the policy formulation process to ensure a bottom-up approach that considers practical implications of policies on patient care and maintain alignment between the company goals and the workforce. On one hand, ethical consideration should not be shelved hence the importance of establishing clear ethical guidance on quality strategies to ensure trust and accountability are not undermined (Hunt et al., 2021). Human resource management practices should include mechanisms for ensuring compliance with relevant regulations and ethical guidelines. This

could be in form of regular audits, training on ethical conduct and the establishment of an ethical review committee for assessing human resource practices.

Investment in Leadership Development: Implement leadership development programs to identify and support leadership qualities among the workforces to ensure effective leadership in management and policy formulation. This supports the study that highlighted the need to strengthen Nigerian health workers on administration and management positions (Azodoh, 2022). Every professional is a potential leader especially in emergencies where quick decision-making ability is required to save life. Integrate patient-centred care principles into hospital policies and practices, emphasizing the importance of personalized and empathetic patient interactions for attainment of organizational goal (Wahdaniah et al., 2023). Hence, the need to collect and analyse patient feedback for continuous improvement of services to meet patient needs and preferences.

Conclusively, there is need to further:

Strengthen Patient-Centered Communication: Healthcare institutions should continue to prioritize effective communication with patients and families to promote patient -centered care and informed decision-making. Training programs can further enhance staff skills on how to address patient questions, complaints management, and to provide appropriate health information timely.

Enhance Workforce Capacity through Training and Development: Considering the important role of adequate staffing and proficiency in achieving patient satisfaction and positive health outcomes, continuous professional development should be institutionalized. Determined training on teamwork, efficiency, and patient flow management can help deal with challenges such as long waiting times.

Promote Teamwork-Oriented Human Resource Practices: Teamwork as an element pf HRM practices has been noted to strongly predicted quality healthcare therefore, hospital

management should encourage collaborative work cultures. This can be achieved through team-building activities, collaborations (multidisciplinary and interdisciplinary), and performance incentives linked to team outcomes.

Improve Service Efficiency to Reduce Waiting Times: Although patient satisfaction was high, long waiting times emerged as a concern. Hence, application of lean management strategies, effective workforce scheduling, and optimization of workflow can help reduce delays and improve service delivery.

Ensure Consistent Supply of Essential Medications: Maintaining adequate supplies of appropriate medications is significant for patient recovery. Thus, the need to strengthen supply chain management and regular audits to ensure continual availability of essential drugs.

Integrate Patient Feedback into Quality Improvement Plans: Patient satisfaction surveys should continue to be administered after hospital visits and used methodically to guide improvements. Areas with lower satisfaction scores, such as waiting time, should be prioritized in quality improvement initiatives.

Embed Discharge Preparation and Safety Practices: Structured discharge processes should remain a priority to prepare patients for continued recovery at home. In addition, ensuring that ward spaces and safety features, such as nurse call bells, are well utilized will support patient safety and decrease risks.

Consequently, healthcare organization through these recommendations can create a supportive environment that promotes teamwork, invests in the ongoing development, strategically attract, recruit and retain capable workforce, implements effective reward systems by integrating intrinsic and extrinsic reward, and formulates policies that focus on quality healthcare. These strategies can contribute to improved patient outcomes, enhanced patient satisfaction, staff motivation, and job satisfaction and organization success.

Recommendations for Future Research

The Nigerian healthcare is undergoing a transformation, with increasing recognition of the essential role that human resource management (HRM) practices play in influencing the quality of healthcare services. To advance this understanding, future research activities should focus on unravelling the nuanced correlation between HRM practices and healthcare quality in the country. This recommendation outlines the agenda for future research, with emphasis on the key areas that deserve exploration to inform evidence-based policies and practices. Therefore, the key recommendations for future studies based on the findings and limitations of the study are as follows:

The need to explore HRM practices across cultural contexts

Building on findings that adequate staffing, teamwork, and training have an influence on patient satisfaction and health outcomes, future research should examine HRM practices across Nigeria's three levels of healthcare. Comparative studies across different states and cultural contexts can identify how local factors shape HRM strategies. Qualitative methods, such as interviews and focus groups, can uncover nuanced insights into staff experiences, patient perspectives, and culturally informed practices (Koce et al., 2019; Alkandi et al., 2023; Adamovic, 2023).

Investigate reward systems and workers characteristics in the health care sector

The study highlighted the link between competent, trained staff and quality healthcare. Future research should focus on middle-aged healthcare workers (40+ years) with considerable experience to understand how reward systems influence motivation, engagement, and patient outcomes. A qualitative approach can reveal subtle dynamics and staff perceptions not captured through quantitative surveys.

Qualitative study to examine healthcare professionals' well-being and technology integration

Given the role of personnel capability and satisfaction in patient outcomes, future studies should explore how HRM practices affect staff well-being, including burnout, job satisfaction, and retention. Additionally, the impact of digital health tools, electronic health records, and telemedicine on HRM efficiency, communication, and care quality should be assessed. Qualitative research can provide in-depth insights into staff and patient experiences with these innovations.

The need to assess HRM practices in public-private Partnerships through a qualitative longitudinal study

Considering the importance of teamwork and professionals competence, future research should investigate HRM practices within public-private healthcare collaborations. Longitudinal studies can track the sustainability and long-term effects of interventions such as training, performance management, and workforce planning. Qualitative methods can capture contextual challenges, collaboration dynamics, and changing staff experience.

It is worthy to note that the four selected human resource management practices evaluated in this study made a huge impact on the overall quality of healthcare accounting for about 21%. This information is vital because there exist other human resource management practices not measured in this study; hence, the need for further research to evaluate other human resource management practices on quality healthcare in Nigeria. This together with factors such as funding, infrastructure, and leadership to mention a few will potentially improve the quality of healthcare in Nigeria. Therefore, the future of healthcare quality in Nigeria centers on having a deeper understanding of the relationship between HRM practices and healthcare outcomes. The proposed research agenda covers a range of topics such as longitudinal studies on specific interventions, technology integration, cultural considerations and focus on the middle- aged and experienced workers. Through these research areas, scholars

can contribute to the evidence needed for informed policy decisions, ultimately driving positive changes in the Nigerian healthcare system.

Limitations of the study

The study has contributed by strengthening the notion of existing relationship between the selected human resource management practices and quality healthcare in Nigeria.

However, the study was conducted only a government tertiary healthcare facility in Lagos state and not inclusive of private health sectors or other government health sectors thus, cannot be generalized. Thus, drawing comparisons between HRM practices and quality care in different government settings such as primary, secondary and tertiary as well as private healthcare sectors in various states of Nigeria can offer great valuable insights.

Furthermore, the research was restricted to a single health institution hence, no likelihood of generalizing to the all hospitals because different findings may emerge from other health facilities in the country.

Delimitations

Adopted quantitative research approach meets the need of the study.

The philosophical approach provided insights into the relationship between studied variables.

The population of the study have experience to provide required information to establish the statistical relationship between the studied concepts.

Conclusions

Quality in healthcare has been an ongoing concern in Nigeria as the desperate outcry for quality healthcare continues to increase hence, this study after review of previous literatures identified some gaps on human resource management aspect of quality care. The study investigated the relationship between selected human resources management practices and quality healthcare in Nigeria with the aim of predicting possible solutions. This investigation is a quantitative research approach using structured close- ended questions. Primary data was

collected with survey tool through an online and manual questionnaires distributed to conveniently selected health professionals. Three hundred and fifty- seven (357) completed questionnaires were collected, stored and processed for analysis. However, trustworthiness of the data was done to determine how effectively the internal validity threats were controlled while, reliability and validity was carried out to ascertain whether the measurement tools correctly measure what they are expected and yield dependable result (Hair et al., 2020).

Following the establishment of data trustworthiness, validity and reliability, analysis with the use of structural equation modelling (SEM) was instituted. The choice of SEM was based on its ability to enable the analysis of the relationships between constructs, through individual measurement by one or more indicator variables. It helps to determine the association between the two variables under study. SEM has the ability to recognize inbuilt measurement error in the indicators while, evaluating complex model relationships (Hair et al, 2021). SEM consists of two methods, CB- SEM and PLS- SEM, which are different in the manner of estimating the model parameters and assumptions concerning the type of measurement. However, for this study, partial least square SEM (PLS- SEM) was adopted. PLS- SEM was embraced because the theoretical framework was required to be analyzed from prediction perspective. It was ideal due to its non-parametric nature that makes no distribution assumption, has the ability to predict and at the same time reduce the demands in regards to the data and the correlation specifications. It is highly efficient in estimating parameter evident by its great statistical power, implying the likelihood of identifying and predicting significant relationship within a population in contrast to CB- SEM.

Next was testing of hypothesis, sixteen alternative hypotheses were evaluated to determine the relationship between human resources management practices comprising of recruitment, reward system, teamwork, training and development and quality healthcare consisting of structure, process and outcome. Thus, hypotheses were tested and their

predictability evaluated through PLS- SEM and the associations between the constructs and indicators evaluated using a composite process. Multiple criteria for hypothesis acceptance was adopted to address the concerns about the $p \leq 0.05$ threshold. To avoid Type, I errors (false positives) that may lead to wrong rejection of the null hypothesis, p-value must be below the alpha level of 0.05 ($\alpha = 0.05$). In addition, to avert Type II errors (false negatives) which entails accepting false null hypothesis, the post hoc statistical power must be equal or exceed 0.8 ($1 - \beta \geq 0.8$). Likewise, the estimated Pearson correlation, coefficient of determination, and path coefficient for each hypothesis fall within the 95% confidence interval (CI). 7 out of the 16- hypothesis emerged statistically significant and were accepted. While, 9 were not statistically significant but were retained because of their impact on the results, which has been elaborately discussed in this study. This is in line with the study aim to predict relationship between the variables, the extent of significance, and to determine the specific HRMP construct that has a positive relationship with quality healthcare and the percentage level.

In addition, identification of each component of quality care that was influenced and the variables with the highest determining factor on quality healthcare was conducted. The goal is to provide deep understanding into issues and concerns of quality healthcare from human resource management practices standpoint. Therefore, analysis of the four selected human resource management practices on quality of care demonstrated statistical significant relationship between each construct and quality healthcare except reward system that did not reveal statistical significant relationship. Overall, the analysis showed a cumulative contribution of HRMPs to quality healthcare as 21% of the observed variability. Further investigation was conducted to determine individual variable contribution and the particular quality component influenced in order to gain deeper insight that will guide decisions and policies. Thus, the findings for the four HRMPs constructs measured are reported below:

Recruitment and quality healthcare (QHC) analysis revealed a significant statistical relationship between the two, demonstrating recruitment influence on hospital operational practices with an R-squared value of 13.7%. Reward System and QHC showed a marginal relationship between reward and quality of care, implying a possible connection that requires further study despite an R-squared value of 16.6%

Again, Teamwork and QHC demonstrated a positive and high statistical relationship among the two, underlining the role of collaboration in improving quality health outcomes with an R-squared value of 20%. T&D and QHC revealed a significant statistical relationship between the two, which underscores the vital role of staff training programs on knowledge acquisition with an R-squared value of 10.5%.

Thus, in the discussion below, the conclusion places the results back into context by showing how the findings address the study problem, demonstrate significance, and contribute to existing literature and practice in healthcare management. The study examined the influence of key human resource management practices (HRMPs), reward system, recruitment, teamwork, and training and development on quality healthcare service delivery, providing empirical evidence of their differential effects across the structure, process, and outcome components of care.

Objective A: Relationship between Recruitment and Quality Healthcare Service Delivery

Recruitment were found to meaningfully influence quality healthcare, mainly through its effect on process of care and not on the structure or outcomes of care. Thus, appropriate recruitment ensure availability of sufficient and proficient staff that enabled effective communication, timely response to patient needs (e.g., nurse call bells), and improved patient outcomes. This highlights the vital role of strategic recruitment in maintaining an efficient workforce and sustaining service quality. The findings suggest that hospitals should prioritize

structured recruitment strategies that meet institutional needs and support process-oriented quality improvements.

Objective B: Relationship between Reward System and Quality Healthcare Service Delivery

The study findings indicate that reward systems are associated with quality healthcare service, although their influence varies across the dimensions of quality care. Higher outer loadings (>0.5) were recorded for indicators such as patient satisfaction, workforce capability, and improved health outcomes, suggesting that both intrinsic and extrinsic rewards can enhance staff motivation and performance. Whereas, generally satisfaction was high, intrinsic rewards were particularly valued by the Nigerian health workers as a driver of quality care. However, reward systems only marginally influence the structural component of care and did not impact processes or outcomes. These findings accentuate the need for hospital management and policymakers to balance intrinsic and extrinsic rewards for optimization of staff engagement, performance, and quality of care. The result suggest future research with focus on middle-aged, experienced staff and cultural differences in reward perceptions.

Objective C: Relationship between Teamwork and Quality Healthcare Service Delivery

Teamwork emerged as the most significant contributor to quality healthcare, strongly influencing patient outcomes. Higher outer loadings were observed for indicators related to patient satisfaction, discharge preparedness, and activities associated with safe care. Teamwork enhances coordination among healthcare workers, promotes collaboration, and improves service efficiency. Unlike, recruitment or training, teamwork primarily affects outcomes rather than structure or processes. This emphasizes the central role of collaborative HRM practices in attaining positive patient outcomes and suggests that healthcare organizations should invest in team-building, interdisciplinary /multidisciplinary coordination, and collaborative decision-making to maximize quality in healthcare.

Objective D: Relationship between Staff Training and Development and Quality Healthcare Service Delivery

Training and development were strongly related with improvements in healthcare processes. It showed that trained workforce were better equipped to address patient concerns, provide clear and broad health information, support informed decision-making, and efficiently manage workflow, thereby reducing long waiting times. Conversely, training did not significantly influence the structural or outcome components of care. Therefore, these findings demonstrate the importance of continuous professional development in improving staff competence and performance, thus indirectly improve patient satisfaction and quality of care. Health institutions should incorporate designed training programs into HRM practices to build workforce capacity and efficiency.

Objective E: Factors that Enhance the Relationship between Human Resource Management Practices and Quality Healthcare

The study identified several enabling factors that strengthen the relationship between HRMPs and quality healthcare. These includes adequate staffing, effective teamwork, clear communication, structured discharge processes, sufficient medication supply, and responsive nurse call systems. These elements jointly enhance patient satisfaction, safety, and health outcomes. The findings emphasize the need for a holistic HRM approach that incorporates recruitment, rewards, training, and teamwork to optimize care quality. Furthermore, they provide evidence-based guidance for resource allocation and staff development, indicating that targeted interventions in these areas can maximize the impact of HRM practices on healthcare delivery.

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APPENDICES

Appendix A: Informed Consent Form

UU_IC - Version 2.1



Informed Consent Form

Part 1: Debriefing of Participants

Student's Name: Eucharia Egbo

Student's E-mail Address: edmorgan5@yahoo.com

Student ID #: R2006D10986437

Supervisor's Name: Dr. Waliu M. Adegbite

University Campus: Unicaf University Zambia (UUZ)



Program of Study: PhD

Research Project Title: Evaluation on the Impact of Human Resource Management Practices on Quality Healthcare in Nigeria

Date: 30-May-2023

Provide a short description (purpose, aim and significance) of the research project, and explain why and how you have chosen this person to participate in this research (maximum 150 words).

The current situation of healthcare in Nigeria is unsatisfactory, efforts has been made to improve Nigeria's healthcare quality but with minimal success. Several researches have concentrated on the area of funding and infrastructures for improving the country's healthcare. However, this study focused primarily on human resource (healthcare professional) who are the key players in healthcare service delivery. Human resource has been recognized to play significant role in improvement of healthcare quality and performance. Thus, there is need to identify human resource management practices that will motivate healthcare personnel, provide job satisfaction, right mindset and the willingness to go extra mile in order to increase performance and deliver quality healthcare services.

To achieve this objective, your hospital was chosen and has given approval to carry out the research. As a healthcare personnel, you have the ability to provide answers to the research questions which centers on quality care and clinical staff.

The above named student is committed to ensuring participant's voluntarily participation in the research project and guaranteeing there are no potential risks and/or harms to the participants.

Participants have the right to withdraw at any stage (prior or post the completion) of the research without any consequences and without providing any explanation. In these cases, data collected will be deleted.

All data and information collected will be coded and will not be accessible to anyone outside this research. Data described and included in dissemination activities will only refer to coded information ensuring beyond the bounds of possibility participant identification.

I, Eucharia Egbo, ensure that all information stated above is true and that all conditions have been met.

Student's Signature: E. C. Egbo

Informed Consent Form**Part 2: Certificate of Consent**

This section is mandatory and should to be signed by the participant(s)

Student's Name: Eucharia Egbo

Student's E-mail Address: edmorgan5@yahoo.com

Student ID #: R2006D10986437

Supervisor's Name: Dr. Waliu M. Adegbite

University Campus: Unicaf University Zambia (UUZ)



Program of Study: PhD

Research Project Title: Evaluation on the Impact of Human Resource Management Practices on Quality Healthcare in Nigeria

I have read the foregoing information about this study, or it has been read to me. I have had the opportunity to ask questions and discuss about it. I have received satisfactory answers to all my questions and I have received enough information about this study. I understand that I am free to withdraw from this study at any time without giving a reason for withdrawing and without negative consequences. I consent to the use of multimedia (e.g. audio recordings, video recordings) for the purposes of my participation in this study. I understand that my data will remain anonymous and confidential, unless stated otherwise. I consent voluntarily to be a participant in this study.

Participant's Print name:

Participant's Signature:

Date:

If the Participant is illiterate:

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had an opportunity to ask questions. I confirm that the aforementioned individual has given consent freely.

Witness's Print name:

Witness's Signature:

Date:

Appendix B: Gatekeeper Letter



UU_GL - Version 2.0



Gatekeeper letter

Address: Lagos State University Teaching Hospital

Date: 30 March 2023

Subject: Permission to Recruit Participants

Dear sir/madam,

I am a doctoral student at Unicaf University Zambia.

As part of my degree I am carrying out a study on Evaluation on the Impact of Human resource management practices on quality healthcare in Nigeria.

I am writing to enquire whether you would be willing to grant me permission to recruit healthcare personnels in this research.

Subject to approval by Unicaf Research Ethics Committee (UREC) this study will be using survey questionnaires.

The study is to understand the effect of human resource management practices on quality healthcare service with the aim to improve healthcare service delivery. The findings will guide management policy.

The name of my supervisor is: Dr. Wasiu M. Adegbite.

I would want to be given access on your premises in order to distribute questionnaires as well as collect them back in due time.

Thank you in advance for your time and for your consideration of this project. Kindly please let me know if you require any further information or need any further clarifications.

Yours Sincerely,

Student's Name: Eucharia Chinyelu EGBO

Student's E-mail: edmorgan5@yahoo.com

Student's Address and Telephone: Lagos- Nigeria, +2349030827764

Supervisor's Title and Name: Dr. Waliu M. Adegbite

Supervisor's Position: Supervisor

Supervisor's E-mail: a.mulero@unicaf.org

Appendix C: Ethics Committee Decision



UREC Decision, Version 2.0

Unicaf University Research Ethics Committee Decision

Student's Name: Eucharia Egbo

Student's ID #: R2006D10986437

Supervisor's Name: Dr ADEGBITE Waliu Mulero

Program of Study: UU-DOC-900-3-ZM

Offer ID /Group ID: O59984G62925

Dissertation Stage: DS3

Research Project Title:

**EVALUATION OF THE IMPACT OF HUMAN RESOURCE MANAGEMENT PRACTICES ON
QUALITY HEALTHCARE IN NIGERIA**

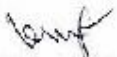
Comments: No comments.

Decision*: A. Approved without revision or comments

Date: 10 May 2023

*Provisional approval provided at the Dissertation Stage 1, whereas the final approval is provided at the Dissertation stage 3.
The student is allowed to proceed to data collection following the final approval.

Appendix D: Local Approval

PROF. A. O. TABAMWO MBChB, FRCOG, FWACS, FRCGS Chief Medical Director 08037787722	 LAGOS STATE GOVERNMENT	 LAGOS STATE UNIVERSITY TEACHING HOSPITAL, IKEJA
	HEALTH RESEARCH AND ETHICS COMMITTEE REG. NO.: NHREC/04/2008 (www.nhrec.net)	
	PROJECT TITLE: HUMAN RESOURCE MANAGEMENT PRACTICES AND QUALITY HEALTHCARE SERVICES IN NIGERIA. REF. NO.: LREC/ 05/10/2141 PRINCIPAL INVESTIGATOR: EUCHARIA EGBO ADDRESS: DEPT. OF HEALTHCARE ADMINISTRATION, UNICAF UNIVERSITY DATE OF RECEIPT OF VALID APPLICATION: 10/03/23 DATE OF APPROVAL: 18/05/23	
	NOTICE OF APPROVAL	
PROF. ADEBOWALE O. ADEKOYA MBBS, MSc, FRCOPTH, FRCO, FRCR CMSc / Director of Clinical Services and Training 08031222768	This is to inform you that the research described here in the submitted protocol, the consent forms, advertisements and other participant information materials have been reviewed and given full approval by the Health Research and Ethics Committee of LASUTH (HREC). This approval dates from 18/05/2023 to 17/11/2023. If there is any delay in starting the Research, please inform the HREC LASUTH so that the dates of approval can be adjusted accordingly. Note that no participant accrual or activity related to this research may be conducted outside of these dates. All informed consent forms used in this study must carry the HREC LASUTH assigned number and duration of HREC approval. In a multiyear research, endeavor to submit your annual report to the HREC early in order to obtain renewal of your approval and avoid disruption of your research. THE NATIONAL CODE FOR HEALTH RESEARCH AND ETHICS (www.nhrec.net) REQUIRES YOU TO COMPLY WITH ALL INSTITUTIONAL GUIDELINES, RULES AND REGULATIONS AND WITH THE TENETS OF THE CODE INCLUDING ENSURING THAT ALL ADVERSE EVENTS ARE REPORTED PROMPTLY TO THE HREC. NO CHANGES ARE PERMITTED IN THE RESEARCH WITHOUT PRIOR APPROVAL BY HREC LASUTH EXCEPT IN CIRCUMSTANCES OUTLINED IN THE CODE. THE HREC RESERVES THE RIGHT TO CONDUCT COMPLIANCE VISIT TO YOUR RESEARCH SITE WITHOUT PREVIOUS NOTIFICATION.	
PROF. YETUNDE KUYINU MBBS, MPH, MD, FRCPH Prof. Public Health & Community Medicine Chairman, LASUTH HREC 08025297440	 PROF. Y.A. KUYINU	

Appendix D: REAF FORM



REAF_DS - Version 3.3 AP



UNICAF UNIVERSITY RESEARCH ETHICS APPLICATION FORM DOCTORAL STUDIES	UREC USE ONLY: Application No: Date Received:

Student's Name: Eucharia Egbo

Student's E-mail Address: edmorgan5@yahoo.com

Student's ID #: R2006D10986437

Supervisor's Name: Dr. Waliu M. Adegbite

University Campus/Program: Unicaf University Zambia: PhD Doctorate of Philosophy



Research Project Title: EVALUATION OF THE IMPACT OF HUMAN RESOURCE MANAGEMENT PRACTICES ON QUALITY HEALTHCARE IN NIGERIA

1. Please state the timelines involved in the proposed research project:

Estimated Start Date: 24-Aug-2020

Estimated End Date: 17-Dec-2024

2. External Research Funding (if applicable):

2.a. Do you have any external funding for your research?

☐ YES

☒ NO

If YES, please answer questions 2b and 2c.

2.b. List any external (third party) sources of funding you plan to utilise for your project. You need to include full details on the source of funds (e.g. state, private or individual sponsor), any prior / existing or future relationships between the funding body / sponsor and any of the principal investigator(s) or co-investigator(s) or student researcher(s), status and timeline of the application and any conditions attached.

2.c. If there are any perceived ethical issues or potential conflicts of interest arising from applying for and/or receiving external funding for the proposed research then these need to be fully disclosed below and also further elaborated on, in the relevant sections on ethical considerations later on in this form.

3. The research project

3.a. **Project Summary:**

In this section fully describe the purpose and underlying rationale for the proposed research project. Ensure that you pose the research questions to be examined, state the hypotheses, and discuss the expected results of your research and their potential.

It is important in your description to use plain language so it can be understood by all members of the UREC, especially those who are not necessarily experts in the particular discipline. To that effect ensure that you fully explain/define any technical terms or discipline-specific terminology (use the space provided in the box).

The study intends to describe the impact of human resource management practices on quality healthcare service in Nigeria. Previous studies identified inadequate funding, poor leadership, dilapidated infrastructure and outdated equipment, poor living standard as the major causes of poor quality healthcare (Oyibocha et al, 2014). However, Adeloje (2017) highlighted that even when funding and tools are available but inability to motivate the workforces, owing of salaries and poor remuneration could still lead to shortages as well as negatively influence quality healthcare delivery. Salami et al., (2016) indicated that much effort has not yet been deployed to people management in the country's health sectors. Roncarolo et al., (2017) stressed that the greatest challenge to quality in healthcare institutions is the workforce issues. Additionally, WHO (2016) underlined the significance of human resources in healthcare improvement and outcome.

Hence, there is need to identify human resource management practices that will motivate the healthcare personnel to put in their best, have the right mindset, willingness to go extra mile and be correctly positioned to provide quality healthcare. Therefore, this study will attempt to provide answers to the following under listed questions and the hypotheses with emphasis on the variables such as reward system, training and development, recruitment and teamwork.

Research Questions

1. What is the relationship between reward system and quality healthcare?
2. What is the relationship between recruitment and quality healthcare?
3. What is the relationship between teamwork and quality healthcare?
4. What is the relationship between training and development and quality healthcare?

Hypotheses

- H 1: There is a significant relationship between reward system and quality healthcare.
H 2: There is a significant relationship between recruitment and quality healthcare.
H 3: There is a significant relationship between teamwork and quality healthcare.
H 4: There is a significant relationship between training and development and quality healthcare.

3.b. Significance of the Proposed Research Study and Potential Benefits:

Outline the potential significance and/or benefits of the research (use the space provided in the box).

Human resource management (HRM) practices involves a number of vital activities that build and improve staff skill such as capacity building, training and development in order to ensure optimal performance and high quality service delivery. HRM has been recognized to play significant role in an organization quest for relevance and competitiveness.

This study focused on health sectors and the outcome will facilitate practical application of HRM practices to healthcare industries. The findings will aid government, also to acquire greater knowledge on the core HRM measures essential for provision of quality healthcare and the tactics vital to improve and support healthcare professionals who are the major players in quality healthcare attainment.

Appropriate implementation will boost staff morale, increase knowledge and job satisfaction. This will possibly lead to improved quality care delivery resulting to better outcome for the patients as well as higher performance and productivity for the health institutions.

In addition, the aim is to help decrease medical tourism and contribute /improve the nation's economy.

4. Project execution:**4.a. The following study is an:**

- ☒ experimental study (primary research)
- ☐ desktop study (secondary research)
- ☐ desktop study using existing databases involving information of human/animal subjects
- ☐ Other

If you have chosen 'Other' please Explain:

4.b. Methods. The following study will involve:

- ☒ a Quantitative methodology
☐ a Qualitative methodology
☐ a mixed methods approach

If you have chosen mixed methods please state below whether you are going to proceed with triangulation or not.

☐ YES ☐ NO

4.c. Please state below which tools you are going to use:

A	B	C
Select the tools to be used in your study	Select how the tools selected in column A will be administered (select one or more)	Select what types of questions will be included in the tools previously selected in column A (select one or more)
Interviews ☐	☐ Face-to-face ☐ Online with camera (synchronous live discussion with camera) ☐ Audio only (synchronous live discussion without camera, i.e., via phone)	☐ Open-ended questions ☐ Close-ended questions ☐ Includes section related to demographics
Focus Groups ☐	☐ Face-to-face ☐ Online with camera (synchronous live discussion with camera) ☐ Audio only (synchronous live discussion without camera, i.e., via phone)	☐ Open-ended questions ☐ Close-ended questions ☐ Includes section related to demographics
Questionnaire ☒	☒ Face-to-face self – administered questionnaire ☐ Online, i.e., via phone or any other platform. The researcher reads the questions to the participants ☒ Online asynchronous self-administered questionnaire (i.e., via email)	☐ Open-ended questions ☒ Close-ended questions ☒ Includes section related to demographics

A	B	C
Select the tools to be used in your study	Select how the tools selected in column A will be administered (select one or more)	Select what types of questions will be included in the tools previously selected in column A (select one or more)
Experiments ☐	☐ Face-to-face ☐ Online with camera (synchronous live discussion with camera) ☐ Audio only (synchronous live discussion without camera, i.e., via phone) ☐ Asynchronously via any online platform	☐ Open-ended questions ☐ Close-ended questions ☐ Includes section related to demographics
Tests ☐	☐ Face-to-face ☐ Online with camera (synchronous live discussion with camera) ☐ Audio only (synchronous live discussion without camera, i.e., via phone) ☐ Asynchronously via any online platform	Provide a brief description of the test in the box 'Other' below.
Other		

5. Participants:

5 a. Does the Project involve the recruitment and participation of additional persons other than the researcher(s) themselves?

- ☒ YES If YES, please complete all following sections.
☐ NO If NO, please directly proceed to Question [7](#).

5 b. Relevant Details of the Participants of the Proposed Research

State the number of participants you plan to recruit, and explain in the box below how the total number was calculated.

Number of participants

A Yamane's sample size formula (Oluigbo et al., 2024; Adam, 2020) for a known finite population was adopted, where the sample size, $n = N / (1 + Ne^2)$, and, 'N' is the population size (4000), and 'e' is the desired margin of error (5%). Thus, the sample size was determined as follows: $n = 4000 / (1 + (4000 \times 0.05^2)) = 364$ participants. Overall, 385 participants were selected to accommodate incomplete or unreturned questionnaires.

Describe important characteristics such as: demographics (e.g. age, gender, location, affiliation, level of fitness, intellectual ability etc). It is also important that you specify any inclusion and exclusion criteria that will be applied (e.g. eligibility criteria for participants).

Age range From To

Gender ☒ Female
☒ Male

Eligibility Criteria:

- Inclusion criteria

1. Participants must work in Lagos state.
2. Participants should be healthcare professional in Lagos state university teaching hospital.
3. Participants must have worked in the hospital for a year

- Exclusion criteria

1. Participants who do not work in Lagos state
2. Participants who do not work in the hospital as healthcare professionals.
3. Participants that are less than a year in the hospital

Disabilities/Disorders: You should only include the participants who can provide informed consent for themselves. Individuals who have a mental disability and are not in a position to provide their own consent should not participate in the study. Please provide information for any other disabilities/disorders the participants may have:

Only those who could provide information by themselves and consent will be recruited. Hence, anyone who could not provide information and their own consent will not participate

Other relevant information (use the space provided in the box):

Awaiting ethical approval from the relevant hospital ethical committes

5 c. Participation & Research setting:

Clearly describe which group of participants (described in 5b) is completing/participating in the material(s)/tool(s) described in 4c above (use the space provided in the box)

385 participants consisting of doctors, nurses, midwives, pharmacists, radiographers, dieticians, laboratory scientists, physical therapists etc. are considered to have the ability to offer right response to the research questions in order to meet the objective of the research. They will complete either the manual or the online questionnaires based on preference.

The research will be conducted in the premise of Lagos state university teaching hospital, to enable selection of respondents that will most likely provide useful and appropriate information.

5 d. Recruitment Process for Human Research Participants:

Clearly describe how the potential participants will be identified, approached and recruited (use the space provided in the box).

The study will adopt random sampling technique, which is nominated as fit for recruiting participants working in Lagos state university teaching hospital that meets the selection criterias.

As a result of human involvement in the study all ethical principles consisting of informed consent, protection of participants, confidentiality, debriefing and deception must be addressed. Hence, informed consent will be obtained using consent form and all participants must sign the consent form. Information regarding the research intent, method, length of the study and the benefits will be provided and they should be assures of confidentiality and anonymity with a right to reject participation without explanation whenever they feel like.

5 e. Research Participants Informed Consent.

Select below which categories of participants will participate in the study. Complete the relevant Informed Consent form and submit it along with the REAF form.

Yes	No	Categories of participants	Form to be completed
☒	☐	Typically Developing population(s) above the maturity age *	Informed Consent Form
☐	☐	Typically Developing population(s) under the maturity age *	Guardian Informed Consent Form

* Maturity age is defined by national regulations in laws of the country in which the research is being conducted.

5 f. Relationship between the principal investigator and participants.

Is there any relationship between the principal investigator (student), co- investigators(s), (supervisor) and participant(s)? For example, if you are conducting research in a school environment on students in your classroom (e.g. instructor-student).

☐ YES ☒ NO

If YES, specify (use the space provided in the box).

6. Potential Risks of the Proposed Research Study.

6 a. i. Are there any potential risks, psychological harm and/or ethical issues associated with the proposed research study, other than risks pertaining to everyday life events?

☐ YES ☒ NO

If YES, specify below and answer the question 6 a.ii.

6 a.ii Provide information on what measures will be taken in order to exclude or minimise risks described in 6.a.i.

6 b. Choose the appropriate option

	Yes	No
i. Will you obtain a written informed consent form from all participants?	☒	☐
ii. Does the research involve, as participants, people whose ability to give free and informed consent is in question?	☐	☒
iii. Does this research involve participants who are children under maturity age? If you answered YES to question iii, complete all following questions. If you answered NO to question iii, do not answer Questions iv, v, vi and proceed to Questions vii, viii, ix and x.	☐	☒
iv. Will the research tools be implemented in a professional educational setting in the presence of other adults (i.e. classroom in the presence of a teacher)?	☐	☐
v. Will informed consent be obtained from the legal guardians (i.e. parents) of children?	☐	☐
vi. Will verbal assent be obtained from children?	☐	☐
vii. Will all data be treated as confidential? If NO, explain why confidentiality of the collected data is not appropriate for this proposed research project, providing details of how all participants will be informed of the fact that any data which they will provide will not be confidential.	☒	☐
viii. Will all participants/data collected be anonymous? If NO, explain why and describe the procedures to be used to ensure the anonymity of participants and/or confidentiality of the collected data both during the conduct of the research and in the subsequent release of its findings.	☒	☐

	Yes	No
ix. Have you ensured that personal data and research data collected from participants will be securely stored for five years?	☒	☐
x. Does this research involve the deception of participants? If YES, describe the nature and extent of the deception involved. Explain how and when the deception will be revealed, and who will administer this debrief to the participants:	☐	☒

6 c. i. Are there any other ethical issues associated with the proposed research study that are not already adequately covered in the preceding sections?

☐ Yes ☒ No

If YES, specify (maximum 150 words).

6.c.ii Provide information on what measures will be taken in order to exclude or minimise ethical issues described in 6.c.i.

6 d. Indicate the Risk Rating.

☐ High ☐ Low

7. Further Approvals

All researchers are advised to check the regulations pertaining to research and General Data Protection Regulation (GDPR) of the country in which the research will take place as each country may have different restrictions on conducting research. **Are there any other approvals required (i.e., from a ministry or public agency in the country, in addition to ethics clearance from UREC) in order to carry out the proposed research study?**

☒ YES ☐ NO If YES, specify.

Ethical approval will be collected from the ethical committee of Lagos government hospital.

8. Application Checklist

Mark ✓ if the study involves any of the following:

- ☐ Children and young people under 18 years of age, vulnerable populations such as children with special educational needs (SEN), racial or ethnic minorities, socioeconomically disadvantaged persons, pregnant women, elderly, malnourished people, and ill people.
- ☐ Research that foresees risks and disadvantages that would affect any participant of the study such as anxiety, stress, pain or physical discomfort, harm risk (which is more than is expected from everyday life) or any other act that participants might believe is detrimental to their wellbeing and/or has the potential to / will infringe on their human rights / fundamental rights.
- ☐ Risk to the well-being and personal safety of the researcher.
- ☐ Administration of any substance (food / drink / chemicals / pharmaceuticals / supplements / chemical agent or vaccines or other substances (including vitamins or food substances) to human participants.
- ☐ Results that may have an adverse impact on the natural or built environment.

9. Further documents

Check that the following documents are attached to your application:

		ATTACHED	NOT APPLICABLE
1	Recruitment advertisement (if any)	☐	☒
2	Informed Consent Form / Guardian Informed Consent Form	☒	☐
3	Research Tool(s)	☒	☐
4	Gatekeeper Letter	☒	☐
5	Any other approvals required in order to carry out the proposed research study, e.g., institutional permission (e.g. school principal or company director) or approval from a local ethics or professional regulatory body.	☐	☐

10. Final Declaration by Applicants:

- (a) I declare that this application is submitted on the basis that the information it contains is confidential and will only be used by Unicaf University for the explicit purpose of ethical review and monitoring of the conduct of the research proposed project as described in the preceding pages.
- (b) I understand that this information will not be used for any other purpose without my prior consent, excluding use intended to satisfy reporting requirements to relevant regulatory bodies.
- (c) The information in this form, together with any accompanying information, is complete and correct to the best of my knowledge and belief and I take full responsibility for it.
- (d) I undertake to abide by the highest possible international ethical standards governing the Code of Practice for Research Involving Human Participants, as published by the UN WHO Research Ethics Review Committee (ERC) on <http://www.who.int/ethics/research/en/> and to which Unicaf University aspires to adhere.
- (e) In addition to respect any and all relevant professional bodies' codes of conduct and/or ethical guidelines, where applicable, while in pursuit of this research project.



I agree with all points listed under Question 10

Student's Name:

Supervisor's Name:

Date of Application: 28-Mar-2023

Important Note:

Save your completed form (we suggest you also print a copy for your records) and then submit it to your UU Dissertation/project supervisor (tutor). **In the case of student projects, the responsibility lies with the Faculty Dissertation/Project Supervisor.** If this is a student application, then it should be submitted via the relevant link in the VLE. Please submit only electronically filled in copies; **do not** hand fill and submit scanned paper copies of this application.

Appendix E: ADAPTED QUESTIONNAIRE APPROVAL

1. The article is “relationship between perception of HR practices and employee outcomes scale”. The tool was from Boon et al. (2011) based on the previous original work of (Boselie et al, 2005).

The authors expressly authorized under the terms and conditions of use that “the article may be used for research, teaching, and private study purposes”. This permission can be found in <http://www.tandfonline.com/page/terms-and-conditions>.

2. Second research instrument was adapted from “Patient Satisfaction Questionnaire short form (PSQ -18)” originally developed by (Marshall & Hays, 1976) and adapted from the work of (Thayaparan & Mahdi, 2013).

“This disclaimer relates to PubMed, PubMed Central (PMC), and Bookshelf. These three resources are scientific literature databases offered to the public by the U.S. National Library of Medicine (NLM). Also, American Psychological Association (APA) produced metadata which permits prompt discovery and downloading of instruments for research and/or teaching. The database was designed to save researchers time from having to reproduce tests when conducting research on previously measured constructs.”

3. Third research instrument was adapted from “Patient Satisfaction with Healthcare Service Quality and Its Associated Factors at One Polyclinic in Hanoi, Vietnam”. The tool was from Duc Thanh et al. (2022) originally developed by Vietnam Ministry of Health. The authors indicated that the articles published in these journals are in the public domain and may be used and reproduced without special permission. However, anyone using the material is requested to properly cite and acknowledge the source.

4. The tool “PSNCQQ - Patient Satisfaction with Nursing Care Quality Questionnaire” (Laschinger et al., 2005) was adapted from “patient satisfaction with the quality of nursing care” by Karaca and Durna (2019) developed by a multidisciplinary research team at the Hospital Corporation of America. However, the articles may be used and reproduced without special permission rather, a request to properly cite and acknowledge the source.

Appendix F: QUESTIONNAIRE

QUESTIONNAIRE ON HUMAN RESOURCE MANAGEMENT PRACTICES AND QUALITY HEALTHCARE SERVICES IN NIGERIA

CONSENT FORM

Dear Sir/ Madam,

I am a Ph. D student conducting a study on healthcare management from UNICAF University on the topic "Human Resource Management Practices and Quality Healthcare in the Nigerian Health sector". Your health institution has been selected to participate in this study and you are subsequently selected as one of the participants with permission from your institution.

Please be informed that all information will be treated with utmost confidence and absolute anonymity. Therefore, the information provided will have no impact on your position or employment now or in future because this research is entirely for academic purpose.

Thank you for your time and co-operation

Egbo E. C. (09030827764) edmorgan5@yahoo.com

I have read the foregoing information about this study, or it has been read to me. I have had the opportunity to ask questions and discuss about it. I have received satisfactory answers to all my questions and I have received enough information about this study. I understand that I am free to withdraw from this study at any time without giving a reason for withdrawing and without negative consequences. I consent to the use of multimedia (e.g. audio recordings, video recordings) for the purposes of my participation in this study. I understand that my data will remain anonymous and confidential, unless stated otherwise. I consent voluntarily to be a participant in this study.

Signature and date.....

DEPARTMENTS

Kindly tick the department applicable to you

Internal Medicine	☐	Surgery	☐	Ophthalmology	☐
Pediatrics	☐	Radiology	☐	Dentistry	☐
Midwifery	☐	Pharmacy	☐	Laboratory	☐
Physiotherapy	☐	Dietetics	☐	Psychiatry	☐
Ear, Nose and Throat	☐	Nursing	☐	Obstetrics and Gynecology	☐
Others.....					

SECTION A

SOCIO-DEMOGRAPHIC FEATURES OF RESPONDENTS

Please tick one box that applies to you for each question

1. Gender?

Male ☐
Female ☐
Others ☐
Prefer Not to Mention ☐

2. Age?

Less than 20 years ☐
21 – 30 years ☐
31 – 40 years ☐
41 – 50 years ☐
51 – 60 years ☐
61 and above ☐

3. Ethnicity?

Yoruba ☐
Igbo ☐
Hausa ☐

4. Religion Affiliation?

Christianity ☐
Islam ☐
African Traditional Religion ☐

5. Marital Status?Single ☐Married ☐Divorced/Separated ☐Widowed ☐**6. Educational Qualification?**PhD ☐ Postgraduate ☐MBBS ☐ BSC Degree ☐General Nursing ☐ Midwifery ☐HND ☐ OND ☐**7. Profession?**Doctor ☐Nurse ☐Radiographer/Sonographer ☐Pharmacist ☐Paramedics ☐Laboratory Scientist ☐Dietician/Nutritionist ☐Psychologists ☐Physical Therapist ☐Midwife ☐Others----- ☐**8. Years of Experience?**1 – 3 years ☐10 – 12 years ☐4- 6 years ☐13 – 15 years ☐7 – 9 years ☐16 years and above ☐**9. Monthly Income (N)?**Less than 100, 000 ☐300, 000 – 399, 000 ☐100, 000 – 199, 000 ☐400, 000 – 499, 000 ☐200, 000 – 299, 000 ☐500, 000 and above ☐

SECTION B

HUMAN RESOURCE MANAGEMENT PRACTICES AND QUALITY HEALTHCARE SERVICE DELIVERY.

B: 1

Instruction: Evaluate the importance of the following reward system on your ability to provide quality care services in your hospital using the following options: [5 = Very Important]; [4 = Important]; [3 = Moderately Important]; [2 = Less Important]; [1 = Not Important].

S/N	ITEMS	1	2	3	4	5
1	The basic pay and benefit package I receive are satisfactory and an important factor driving my performance					
2	Performance related pay is an important feature that motivates me to work harder as well as provide quality services					
3	The monetary rewards is an important factor that gives me inner drive to meet or exceed patient quality service expectation					
4	The non-monetary rewards such as recognition or praise is important factor that boost my inner drive to provide quality care services					
5	The possibility of occupying higher position or being promoted is an important factor for me to increase performance and quality of service					
6	Fairly good reward system is an important factor that can makes me stay on the job.					

B: 2

Instruction: Please tick the appropriate option that express your perception on how recruitment practice impact the quality of healthcare in your hospital: [5= Very high impact]; [4 = High impact]; [3 = Moderate impact]; [2 = Low impact]; [1 = No impact]

S/N	ITEMS	1	2	3	4	5

1	In my organization recruitment process has an impact and aids in the selection of staff with the necessary knowledge and skills required for optimal performance					
2	Fairness in recruitment without biases has an impact in ensuring the right staff capable for high quality service delivery are hired					
3	Provision of adequate information about the hospital and my performance expectation impact my willingness or readiness to provide quality services					
4	Efficient recruitment practice has an impact and ensure competent staff with the right skill mix are recruited for better quality service.					
5	Constant recruitment helps to avoid shortage of personnel and work overload which can impact job performance and quality of service.					
6	The impact of onboarding for new staff aids in integrating and equipping them with work behaviour necessary for quality service.					
7	Job description spells out my role and helps me to understand what is expected of me and thus, impact the quality of service I provide.					

B: 3

Instruction: Please tick the option that best describes your agreement or disagreement with each of the statement on the practice of teamwork in your hospital in regards to quality care services.

[5 = Strongly Agree]; [4 = Agree]; [3 = Undecided]; [2 = Disagree]; [1 = Strongly Disagree].

S/N	ITEMS	1	2	3	4	5
1	Responsibilities are shared among unit members which enables me to carry out my tasks effectively					
2	Knowledge are often shared among unit members leading to improved performance					
3	I and my team members jointly take work decisions and are responsible for the outcome					

4	There is good work relationship with my colleagues and the work climate is positive					
5	The combined group efforts and activities improves our performances and quality service delivery					
6	I have good collaboration with my colleagues and easily receive support when confronted with unfamiliar activities or procedures.					
7	Attending to patient health needs as a team has helped to improve my work attitude and behaviour.					

B: 4

Instruction: Assess your opinion on the effect of training and development on quality care service delivery in your hospital by selecting the suitable option that expresses your agreement or disagreement: [5 = Fully Agree]; [4 = Agree]; [3 = Neutral]; [2 = Disagree]; [1 = Fully Disagree]

S/N	ITEMS	1	2	3	4	5
1	Offering financial assistance to me for higher education helps to improve my skills for providing better and more quality service.					
2	Training inspires me by providing a sense of job security and a commitment to improving my skills in order to provide better and more quality service.					
3	My hospital provide training on how to cope with the constantly changing technology in the medical field to enable me perform my job more effectively					
4	I attend yearly mandatory training in the hospital which provides extra knowledge and talent to perform my duties optimally.					
5	Through training I have opportunity to develop new skills for my current job for delivery of better quality service.					
6	Knowledge obtained in training increases my feeling of self-worth which enhances my performance.					

7	In-service training provides me higher understanding of good work behaviour and attitude which improves my performance and quality.					
8	I receive constructive feedbacks from my manager which helps to increase my knowledge and improve performance.					

SECTION C

QUALITY HEALTHCARE SERVICES

Instruction: Please rate your hospital quality healthcare service performance based on the under listed questions. Tick the option that best describes your agreement or disagreement with each of the statement:

[5 = Strongly Agree]; [4 = Agree]; [3 = Undecided]; [2= Disagree]; [1= Strongly Disagree].

S/N	ITEMS	1	2	3	4	5
1	The hospital is centrally located and easy for patient to access.					
2	There are adequate hospital equipment and they function properly.					
3	The available equipment are serviced often for optimal performance.					
4	The hospital environment is clean, hygienic and conducive for infection prevention and control.					
5	The hospital has appropriate beds and furniture's to meet the patients' needs.					
6	There are sufficient patient clothing's and linens to promote patient comfort and safety.					
7	The hospital wards permits performance of care activities safely, minimizing risk and harm.					
8	There are clearly written and accessible policies to guide practice.					
9	There are opportunities available for me to express my ideas or concern to the management.					
10	My manager communicates to me when my work needs to be improved for better performance.					

11	There are sufficient supplies of medications and consumables for patient treatment.					
12	The doctors and nurses are sufficient in number and competent to handle patient medical needs and all forms of illness.					
13	The healthcare professionals are neatly dressed and are easy to identify in their respective uniforms.					
14	There is availability of training and educational activities for my professional development in order to enhance my competency.					
15	The hospital has invested in technological-scientific knowledge to develop my work and minimize errors.					
16	There are adequate and right skill mix for quality care service delivery.					
17	The patient complains of spending long time in each hospital visit.					
18	I often receive appreciation from patients/families for services rendered.					
19	There are nurse call bells which enables me to respond to patient care need promptly.					
20	I show friendliness and professionalism in interaction with patient/families.					
21	Verbal, physical or any form of abuse to a patient is a dismissible offence					
22	I talk to my patients and carry them along when carrying out any procedure or treatment.					
23	The personnel show concern with patient questions and worries					
24	Patient's complaints are handled effectively and timely					
25	Information about health condition are clearly and elaborately discussed with patient and/or families					
26	Patient are supported to make informed decision regarding their care					
27	Every patient is treated as an individual and prompt healthcare services provided without biases or prejudice.					

28	Patients' follow- up appointment are easily made.					
29	There are discharge processes in place and patient/families are prepared for discharges.					
30	Patient/families have improved knowledge on health promotion, illness prevention and coping strategies.					
31	Mortality rate is high due to inability to afford cost of healthcare.					
32	There are high rates of improvement in patients' health condition, partial or total recovery following healthcare services provided					
33	Every patient is given a satisfaction survey post visit to out-patient and in-patient department					
34	The patient satisfaction survey records high level of satisfaction with the quality of healthcare services received.					
35	The surveys' reports on patient dissatisfaction to the quality of care received are used for quality improvement program within the hospital.					

Thank you very much for your help!