THE QUALITY OF WORK LIFE OF FRONTLINE HEALTHCARE WORKERS THAT AFFECT SERVICE DELIVERY AT SELECTED HOSPITALS IN SOUTH AFRICA

by

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DECLARATION

I, Michaelle Deonarain, hereby certify that the work in this thesis is my original work and has not been presented previously for a degree at any other university, in part or in its full. I further declare that this work does not infringe or violate the rights of others in any way, as all materials cited or quoted by me are indicated and acknowledged through a full list of references.

_____ 30 January 2024

M Deonarain Date

DEDICATION

To my husband, Bruce

Always in loving memory of you, Dad and Nick.

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ABSTRACT

Good health and well-being is the third of the 17 sustainable development goals to transform the world. As a key contributor to achieving this goal, the global healthcare sector has come under the spotlight. The Covid-19 pandemic presented multiple challenges for healthcare workers globally. Post the pandemic, high quality of work life became a priority for many professionals. The study assessed how quality of work life affects the ability of frontline healthcare workers to provide a high quality of service. Adopting a descriptive exploratory paradigm, the research used mixed methods to gather data from a purposive sample using an in-depth questionnaire comprising of open and closed ended questions. Data revealed that the daily challenges experienced by frontline healthcare workers, particularly those pertaining to the working environment, at selected public central hospitals in South Africa, inhibit their capacity to deliver high quality of service resulting in a low quality of work life.

The underlying challenge of inadequate financial support has led to 71% of respondents expressing a lack of resources to fulfil their daily tasks. Furthermore, 90% of respondents believe that there is a serious staff shortage, which leads to other issues such as long wait times, cross contamination and low quality of worklife. Other noteworthy statistics show that, while 73% of the employees received training, only 31% reported skill advancement.

The study presented a model for improving the quality of work life to aid improving service delivery which is constantly under scrutiny in South Africa. Results show that despite the implementation of numerous strategies, monitoring and evaluating the execution through data collection, analysis and reporting to promote openness and accountability, ultimately leading to successful implementation is still a challenge.

Keywords: Quality of work life, global challenges in healthcare, service delivery, public sector healthcare, South African healthcare.

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LIST OF ACRONYMS

Acquired Immunodeficiency Syndrome	AIDS
Artificial Intelligence	AI
Civil Registration and Vital Statistics	CRVS
Continuous Professional Development	CPD
Council for Health Service Accreditation of South Africa	COHSASA
Democratic Republic of Congo	DRC
East African Community	EAC
East African Community	EAC
Emergency medical services	EMS
Front line managers	FLM
Gender-based violence	GBV
Global Financing Facility	GFF
Global Green and Health Hospitals	GGHH
Global Health Observatory	GHO
Global Health Observatory	GHO
Health and health-related sustainable development goals	HHHSDG
Healthcare-associated infections	HAI
Human Immunodeficiency Virus	HIV
Job Demands-Control theory	JDC
Machine learning	ML
National Department of Health	NDoH
National Health Insurance	NHI
National Health Quality Improvement Plan	NHQIP
Office of Health Standards Compliance	OHSC
Pan American Health Organization	PAHO
Person-environment fit theory	PE
Prioritized Operational Plan	POP-C
Public Healthcare	PHC
Quality Learning Centre	QLC
Quality of Work life	QWL
Refusal of hospital treatment	RHT

Reproductive, maternal, neonatal, child and adolescent health	RMNCAH
Self Determination Theory	SDT
South Africa	SA
Sustainable development goal	SDG
The International Organization for Migration	IOM
The Joint United Nations Programme on HIV and AIDS	UNAIDS
Tuberculosis	TB
UN Refugee Agency	UNHCR
United Nations Children's Fund	UNICEF
United Nations Population Fund	UNFPA
United States of America	USA
Work life balance	WLB
World Health Organisation	WHO

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CHAPTER ONE

INTRODUCTION AND OVERVIEW OF THE STUDY

1.1 Introduction

The public healthcare sector is an essential component of society, particularly in developing nations like South Africa, where the majority of the population lives below the poverty line and cannot afford private healthcare (Galal, 2022). Reliance on public healthcare means that the sector must be equipped with resources to cope with the needs of society. The South African healthcare system has come under scrutiny after repeated reports of low quality of service delivery. Despite extensive research and interventions, there is little progress regarding the quality of service delivered at public healthcare institutions in South Africa (Maphumulo, 2019). The service quality is dependent on many factors within the system many of which will impact on the quality of work life of the employees who work in the healthcare system.

The changes in the growing population of 53.39 million, lifestyle behaviours and patterns of disease in South Africa, have caused major public health challenges. More especially the COVID-19 pandemic which caused major turmoil across the world and saw 6,956,173 globally and 102,595 deaths in South Africa (World Health Organisation, 2023), causing quality of work life in the health sector to plummet and pose health and economic burdens.

Quality of work life (QWL) encompasses the issue of how employees perceive their hours spent at work. Their experience, whether positive or negative will impact on their job satisfaction. High QWL brings about an impression of high job satisfaction, in turn contributing to the ability to produce higher quality of service delivery (Sithole, 2019). Researchers assert that there are various dimensions to QWL which affect job performance (Lodh & Ghosh, 2022 and Dhingra & Dhingra, 2021) which will be outlined in Chapter Five.

This study takes the notion of QWL and applies it to the field of healthcare in a public setting within the borders of South Africa. While international case studies are examined, the unique circumstances of the South African setting will be highlighted throughout the study. There is a plethora of studies that conclude that the quality of health care in South Africa has been compromised due to several challenges experienced by health care service providers. Authors consistently highlight inefficiencies in service delivery in the public healthcare sector globally

due to challenges experienced by healthcare workers (Dixon-Woods, McNicol and Martin, 2012; Murthy, 2014; Maphumulo, 2019; and Omondi, 2016).

This study explored the challenges experienced during service delivery by frontline healthcare workers at South African hospitals. Frontline workers are so overwhelmed with work overload that they are unable to deliver high quality of service (Maphumulo, 2019) and this could impact on their quality of work life (QWL) and job satisfaction (Zaman, Ansari, and Chaturvedi, 2021). According to Maphumulo and Bhengu (2019) improving the quality of the service delivered at health care facilities means that there are smaller quantity of errors, less delays in service delivery, improvements in efficiency, increased market share and lower costs. This highlights that the decline in quality health care has caused the public to lose trust in the healthcare system in South Africa (Malakoane et al., 2020). In response to this, the Government of South Africa previously initiated several quality improvement programmes that did not produce the required level of quality in service delivery (Maphumulo and Bhengu, 2019). The National Health Insurance (NHI) scheme is one of the country's most recent efforts. The effort, which was launched in 2012, aims to give all South Africans access to high-quality, inexpensive healthcare. The government intends to boost health-care funding, increase access to healthcare services, and improve healthcare quality through the NHI project (Smart, 2023). There are still debates and the project is not implemented. Additionally, The National Health Quality Improvement Plan (NHQIP) was initiated in 2021 with the goal of closing quality improvement knowledge gaps by training 100 employees at each province with the hope of forming a group of quality specialists. It was proposed that the initiative be launched as a pilot project in October and November 2021, followed by an evaluation in December 2021 and January 2022. Changes were made and the final product was launched in February 2022. The instruction was divided into four twenty-minute segments that were delivered via video. Senior, middle, and operational management workers were expected to take pre and post lecture assessments as well as a training evaluation. Participants would have received a certificate and Continuous Professional Development (CPD) points (SA Medical Association, 2021).

Another initiative is the Ideal Clinic Realisation and Maintenance (ICRM) strategy implemented in South Africa. The ICRM plan intends to improve the quality-of-service delivery in the country's primary healthcare facilities, guaranteeing that all South Africans have access to high-quality, equitable health-care services. Furthermore, accrediting organisations such as the Council for Health Services Accreditation of South Africa (COHSASA) and the

National Committee for Quality Assurance have been established by the South African government. These organisations seek to ensure uniform and high-quality care throughout South Africa's health-care system. COHSASA's primary goal is to improve the quality and safety of care throughout health facilities by focusing on patient safety, service delivery, and operational efficiency (National Department of Health, n.d).

This study is significant because it highlights the obstacles and issues that frontline healthcare personnel encounter, which impair their quality of work life. Frontline employees are those who are in direct contact with the patients, consisting of nurses at all levels, medical assistants, pharmacists, radiologists, doctors, administrators and ward assistants. Based on the findings of the study, changes may be implemented in training, facilities, structures and systems to enhance the quality of work life and ability to provide high standards in service delivery. The study through an empirical means, sought to determine whether frontline healthcare workers are efficiently equipped to contribute to improved quality healthcare.

1.2 Problem description and background

In 2021, a National Health Quality Improvement Plan (NHQIP) was developed by the National Department of Health (NDoH) and members of the Lancet National Commission. The plan was to address the challenges that South Africa was facing regarding the quality-of-service delivered in both the public and private health sectors. A customised training programme was implemented as one of the strategies for improving quality of services. Additionally, the training programme was rolled out in conjunction with implementation projects focusing on translating the knowledge gained during the training into tangible improvements in the quality of care provided. A baseline assessment regarding the status of quality related training was conducted across all provinces. The assessment revealed that several employees in most provinces at all levels of responsibility have received training on healthcare quality which was aimed to lay a good foundation for the planned NHQIP however, it is still unclear if the training was completed.

Despite the interventions, frontline healthcare workers still experience challenges in delivering high quality service (Maphumulo and Bhengu, 2019) which could be attributed to challenges beyond the control of frontline health care providers. Maphumulo and Bhengu (2019) cite the following challenges faced by the South African health care system:

- unequal distribution of resources,
- management and leadership crisis,
- increased disease burden,
- pull and push factors which include political and economic factors that leads to urbanisation and increase of immigrants and locals using the healthcare system,
- slow progress in restructuring the healthcare system which also include strategies adopted by government to improve the quality of healthcare delivery.

It is critical to evaluate the above challenges as well as other difficulties since this approach will aid in the implementation of interventions to improve work-life quality, resulting in increased job satisfaction and, eventually, higher service delivery quality. There is a need for the study to be conducted at South African hospitals because other studies have shown that enhancing the QWL has improved service delivery (Maphumulo and Bhengu, 2019), promotes organisational citizenship behaviour (Kashani, 2012), improves work performance (Mafula, Nursalam and Sukartini, 2020) and enhances job commitment (Won, 2021). While the preceding studies focused on QWL, no studies were identified in which the variables of QWL and difficulties with maintaining a high quality of service delivery were investigated together in a South African public healthcare setting.

1.3 Contribution to the field of research

The study will draw from and build on previous research in this area to build a more complete picture of how the challenges in the healthcare system affects service delivery. As poor service quality is a recurring theme in majority of the studies, it may help to look at the problem from a different perspective. Challenges are inevitable; however this study will highlight different ways to cope with the challenges experienced. Improving the quality of work life of frontline employees may equip them and motivate them to find alternative ways to cope with the challenges experienced. To date, the is a dearth of South African research that have evaluated the issues faced in the public healthcare sector in terms of the effects on work-life quality. Furthermore, there is limited research on how the current interventions for improved service delivery in South African healthcare affects the quality of life of frontline healthcare professionals in public institutions.

1.4 The Rationale

Poor service quality is recurring according to Tana (2013) and Maphumulo and Bhengu (2019) who reported low quality service levels in the healthcare sector. Although their studies were 6 years apart, no improvements were recorded. There is an urgent need to conduct further research to investigate the efficiency of the strategies implemented to improve the quality of service delivered by frontline healthcare workers in the South African Healthcare sector. Despite the fact that there have been strategies in place for several years, research on monitoring and evaluating the strategies based on data collection, analysis, and reporting would promote transparency and accountability, leading to successful implementation (Moldovan et al., 2022).

The Presidential health compact (2019) highlighted 9 pillars to strengthen the South African health system toward an integrated and unified health system. Of the 9 pillars, the following pillars is applicable to this study to address and understand issues of frontline healthcare workers and the challenges of service delivery:

- Pillar 1 - Augment human resource for health operational plan;
- Pillar 3 - Execute the infrastructure plan to ensure adequate, appropriately distributed and well-maintained health facilities;
- Pillar 5 - Improve the quality, safety and quantity of healthcare services provided with a focus on primary healthcare; and
- Pillar 9 - Develop an information system that will guide the health system policies, strategies and investments.

Based on the pillars above, the significance of this study is to investigate whether frontline healthcare workers are efficiently equipped to contribute to improved quality healthcare. This study will make recommendations to strengthen the ability of frontline healthcare workers to provide high quality service to the people of South Africa.

1.5 Aim

The aim of this study is to report on the quality of work life (QWL) experienced by frontline healthcare workers in the South African healthcare sector and to assess how QWL affects their ability to deliver high quality service.

1.6 Objectives

- Objective 1: Investigate the expectations of frontline healthcare workers after they embarked on the healthcare quality training;
- Objective 2: Determine what knowledge and skills were acquired from the healthcare quality training;
- Objective 3: Discover the current QWL experiences of frontline healthcare workers;
- Objective 4: Propose a model to promote high quality of work life to ensure that a high quality of service is provided.

The research questions below are guided by the aims and objectives of the study. It is imperative to understand the significant role played by frontline healthcare workers as well as their challenges. Only then can improved strategies be implemented that can assist in overcoming the challenges highlighted and ultimately improve service quality in public healthcare. Therefore, the research questions are:

- Are healthcare workers able to deliver high quality healthcare?
- What are the experiences of frontline healthcare workers in their daily service delivery duties?
- What are the challenges that they experience regarding service delivery?
- How do challenges impact on their quality of work life?
- How effective are current interventions in dealing with challenges?

The section that follows shows how the research questions, objectives and propositions are related.

1.6.1 Linking research questions, objectives and propositions

The research questions, objectives and proposition of this study are linked to form the basis of the problem statement, as displayed in Table 1.1.

Table 1.1: Links between the secondary research questions, objectives, and proposition

Research question	**Linking objective**	**Linking proposition**
RQ1	OBJ 4	Frontline health workers experience

Are healthcare workers able to deliver high quality healthcare?	Propose a model to promote high quality of work life to ensure that a high quality of service is provided.	several challenges that inhibit them from delivering high quality of healthcare services.
RQ2 What are the experiences of frontline healthcare workers in their daily service delivery duties?	OBJ 3 Discover the current QWL experiences of frontline healthcare workers.	Understand the QWL experiences that will assist in developing a model that is relevant to the South African healthcare sector.
RQ3 What are the challenges that they experience regarding service delivery?	OBJ 3 Discover the current QWL experiences of frontline healthcare workers.	Understand how the challenges experienced during service delivery will assist in developing a model that is relevant to the South African healthcare sector.
RQ4 How do challenges impact on their quality of work life?	OBJ 3 Discover the current QWL experiences of frontline healthcare workers.	Frontline healthcare workers are more likely to deliver a higher quality of service if a high QWL is experienced.
RQ5 How effective are current interventions in dealing with challenges.	OBJ 1 Investigate the expectations of frontline healthcare workers after they embarked on the healthcare quality training.	If the current interventions are not working, new measures must be implemented.

	OBJ 2 Determine what knowledge and skills were acquired from the healthcare quality training.	

Source: Researcher's own work

Table 1.1 reveals the associations between the study's research questions, aims and proposition. Column 1 contains the research questions, column 2 shows the objectives, and column 3 indicates how the research questions are related to the proposition. The next section provides a detailed account of the preliminary literature review that was done for this study.

1.7 Preliminary literature study

Various authors agree that regardless of the interventions put in place by the South African government year after year, it fails to achieve fundamental standards of care and patient expectations (National Department of Health, 2012) causing the public to lose confidence in the healthcare system. There is also an increase in avoidable errors by the health care providers (Maphumulo and Bhengu, 2019). The healthcare system in South Africa is in desperate need of repair (Koelble and Siddle, 2014). However, understanding challenges at grassroots level may present the clue to solving the quality crisis that exists in the service delivery system. The frontline staff in leadership positions who are dealing with the patients and staff face challenges daily, that they themselves, cannot fix. Investigating these challenges and identifying loopholes in the current intervention strategies may be their only hope to restore confidence in the South African health care system.

According to the Lancet NHQIP report (2019), South Africa has achieved good progress in improving the health and well-being of the overall population since the end of apartheid in 1994, as evidenced by statistics indicating improved life expectancy and lower death rates. However, the National Department of Health (NDoH) report year after year states that South Africa still faces substantial challenges in providing high quality health care to the people of South Africa. These challenges include "the quadruple burden of disease; the racialised nature of poverty levels and unemployment rates; huge spatial inequalities; inequities among provinces, between urban and rural areas, and between the public and private health sectors; inadequate resources (human, financial and physical); poor management and governance of the health system; failures in ethical leadership, and lack of accountability" (South African Lancet

National Commission, 2019:xvii). These challenges are consistent with those previously highlighted by Dixon-Woods, McNicol and Martin (2012), which proves that interventions previously implemented were not successful. There is a seven (7) year gap between these findings therefore an investigation is required to understand why the findings are similar and why were the problems not resolved in seven years.

Experiencing these challenges may affect the way service is provided by frontline healthcare workers. Frontline healthcare workers have frequent face-to-face interaction with patients and staff. Interventions implemented by the NDoH include ten (10) focus areas:

- "The urgent need to augment and better distribute human resources for health,
- improving supply chain management to improve access to essential medicines, equipment and supplies;
- executing the health infrastructure plan;
- engaging the private sector;
- involving the community;
- improving the health system in terms of quality, safety and quantity;
- increasing efficiency in financial management;
- developing national health information systems to guide policies, strategies and investment, and
- strengthening governance and leadership to ensure accountability." (Presidential Health Compact, 2019:2).

The Presidential Health Compact offered thorough action plans for each of the aforementioned interventions, outlining all actions taken, expected outcomes/results, accountable partners, essential success criteria and time frames for completion of the action items. Interesting to note that the above focus areas will impact on the quality of work life of the frontline healthcare workers. Quality of work life influences how the frontline healthcare workers respond to challenges that may present itself during a typical workday. The higher the quality of work life, the more likely the employee will respond positively and accept problems as learning opportunities, i.e., they are more likely to go above and beyond their existing job descriptions to give high quality health care (Mafula et al., 2020). Quality of life at work is vital because happy people are more productive, devoted, and loyal. The QWL approach fosters a shared vision, common goals, and a sense of belonging among employees and organisations (Scotti and Harmon, 2014). In depth discussions on these concepts will continue in Chapter Five.

When compared to the commercial aviation industry, frontline health care workers have similar challenges including long working hours, irregular shift patterns and high stress levels due to the completion of urgent human intensive tasks in a constant high-pressure environment. Won (2021) conducted research in the commercial aviation industry and discovered that long and irregular work hours had an impact on worker happiness. Work hours affect biological rhythms such as sleep, hormones, and recuperation, as well as social rhythms that influence lifestyle, physical activity, and regular nutrition, according to the study. Work-life balance has been connected to long working hours or an uneven shift pattern (Won, 2021). Facing further challenges such as inadequate infrastructure, high workloads and shortage of human resources (Murthy, 2014), insufficient drugs and medical supplies (Omondi, 2016), a scarcity in non-human resources in South Africa and low quality and bad maintenance of required appliances (Moyimane, Matlala and Kekana, 2017) has a significant impact on job satisfaction levels.

Job satisfaction, according to Zaman, Ansari, and Chaturvedi (2021) is a condition in which people regard their work as 'pleasant.' Employees are more likely to be satisfied with their jobs if they believe they are fairly compensated for their responsibilities, if there are opportunities for advancement within the company, and if they have a positive relationship with the other employees with whom they must interact while performing their responsibilities. A connection based on trust and respect motivates people to perform to the best of their ability, which has a substantial impact on service delivery levels. According to Zaman, Ansari and Chaturvedi (2021) there is a link between QWL, job satisfaction, and service delivery.

A key factor in job satisfaction is the environment in which the employees work at, however, the present physical state of public facilities is appalling and not favourable to the delivery of high-quality health services (The South African Medical Association, 2021). Furthermore, for the delivery of high-quality service, employees need to be equipped with the necessary tools required which is not the case as Sithole and Mathonsi (2015) has highlighted the need for government to strengthen human and material resources in terms of quantity and quality.

1.8 Theoretical framework

Constructs from various key theories used in QWL studies will be analysed in Chapter Five. Amongst others, the Swanson's theory of caring, needs satisfaction and spill over theory, The

three-factor theory, The 5 Q's model, Human Relation Theory and the QWL model were explored. During a preliminary review of literature focusing on methods, theories and frameworks, it was found that there are commonalities and inadequacies in each theory regarding achieving a high QWL which spills over onto how the work is performed i.e., service delivery. High quality service delivery depends largely on the quality of the employee's experience at work (Sinha, 2012) showing that the concepts of high quality of service delivery and high quality of work life are interrelated in that they have a mutually dependent relationship.

1.9 Conceptual framework

Commitment to high QWL, according to the theories examined in Chapter Five, entails worker participation at all levels of decision-making, building and maintaining a committed relationship of trust between the company and the employees, and reinforcing a reward system that is fair and contingent on work performance. It is also critical for organisations to be attentive to employee requirements, to create a pleasant environment at work, and to adequately compensate employees for a job well done. When an employee's income and benefits are sufficient to maintain a socially acceptable standard of living, stress is decreased and employee performance increases, promoting social integration at work and fostering an atmosphere of equality and mutual understanding. A reasonable workload not only allows for family social activities, but it also adds to greater employee job satisfaction and productivity, as indicated by the spill over hypothesis discussed in Chapter Five. High QWL develops a shared vision, common goals, and a sense of belonging among people and the company. Furthermore, better working conditions are closely related to higher production (Nayak et al., 2018, Wong and Laschinger, 2015, Camgoz-Akdag and Zineldin, 2010). Section 5.15 will discuss these ideas further.

1.10 Research methods

A research design explains the approach that the researcher believes is the best appropriate way to collect, assess, and apply data pertinent to the topic. Kaur (2016) suggests that there are two main approaches to research, namely quantitative and qualitative. Qualitative research implies an emphasis on the process and meanings that are rigorously examined although it cannot be precisely measured. Qualitative data is presented in language rather than numbers. Quantitative research involves the analysis of numerical data. According to Kaur (2016), quantitative

research has also served the public health care sector. Quantitative research entails larger-scale surveys or research that allows for the development of a factual base with sufficient robustness to allow for statistically rigorous analysis (Kaur, 2016). Surveys, observation, and experimentation are three methods for collecting quantitative primary data.

In this study, a mixed method study comprising of both qualitative and quantitative methods will be used for this study. A mixed method will generate comprehensive and holistic information to better guide data analysis towards conclusions and recommendations of this study and future research opportunities.

For the quantitative components, a positivist research technique was used. The positivist approach, according to Kaur (2016), is the quantitative strategy utilised to ensure that the research is entirely objective, and that the researcher remains independent of the investigation with no human interest. Kaur (2016) further affirms that this method is predominantly used in the public healthcare sector. Furthermore, utilising this strategy will limit the researcher to only the data that will be acquired, assessed, and objectively interpreted from an outside perspective, allowing the researcher to focus on the facts rather than the respondents' thoughts and feelings. According to Kaur (2016), the positivist approach is based on observed human conduct, and numerous tests can be performed to assist the researcher in avoiding biased conclusions. As a result, the emphasis is on consistency and ease of replication.

The study adopted a descriptive exploratory paradigm for the qualitative aspects, which is a type of research design that aims to obtain information systematically. It is usually used to describe a phenomenon, situation or population. More specifically, it helps answer the what, when, where and how questions regarding the research problem, rather than the why. Babbie and Mouton (2012) states that exploratory studies are necessary when some facts are known, but more information is needed for developing a viable conceptual framework which is relevant to the current study.

The sample was representative of South African public central hospitals that are QLC participants in the NHQIP plan. The selected hospitals were on the QLC list and a total of 360 frontline healthcare workers were targeted. The workers included administration, admissions, nurses, doctors, pharmacists, radiologists and ward attendants. Both in and outpatient departments were targeted. Purposive sampling allowed the researcher to ensure that the

sample chosen are working in frontline positions to ensure that the data received is valid however the research will be time bound and available for completion over a specific 2-week period. The reason for the long-time frame is to ensure that a representative sample is drawn from all selected hospitals considering the shift work patterns.

A structured questionnaire comprising of a series of open-ended and closed-ended questions was administered to all frontline employees during the quiet times of the day. Using different types of questions enabled the researcher to achieve the aim of the study easily. While closed-ended questions limit responses to a range of words on a list, open ended questions does not provide a list to choose from but rather allows the respondents to provide comprehensive responses. Open ended questions suit exploratory research where the responses cannot be predicted or expected. The closed-ended questions will consist mainly of rating/Likert scale and tick box questions to determine the opinions of the respondents.

The use of open-ended and closed-ended questions eliminates the potential of limiting responses, as only asking closed-ended questions limits the respondent to a specific response (Welman, Kruger, and Mitchell, 2005). The purpose of this questionnaire is to investigate the obstacles of this sample and how they affect their capacity to provide high-quality service delivery, as well as how they perceive the effects of the challenges on the individuals working under their supervision.

1.11 Limitations and delimitations of the study

1.11.1 Limitations

The study was confined to 2 central hospitals which are registered as public sector hospitals in 2 provinces in South Africa. Furthermore, the chosen hospitals had to be registered on the National Health Quality Improvement Plan (NHQIP) as a Quality Learning Centre (QLC). It is important to note that different parts of South Africa may experience different challenges therefore the selected hospitals were located at different provinces in South Africa, namely KwaZulu-Natal and Gauteng. Additionally, the perception of service quality by different populations in the different provinces may vary. There is an opportunity to replicate the study in each of the nine provinces of South Africa to other types of hospitals such as tertiary, regional and district hospitals to get a clear indication of the holistic viewpoint. As such, the results obtained in this study may not be reflective of the entire health sector of South Africa. Further

studies may also include primary care facilities such as community health centres, clinics and Emergency Medical Services (EMS) stations.

1.11.2 Delimitations

The study assessed service delivery from the perspective of the staff delivering the service and not from the perceptions of the patients receiving the service. Furthermore, a portion of the study utilised a qualitative design and purposive sampling, thus limiting the population representation. The conclusions cannot be generalised to other hospitals who do not operate in the public domain.

The employees who were targeted to be part of the sample worked in frontline positions and dealt directly with patients. The departments included reception, admissions, wards, pharmacy, radiology and clinical staff who worked in both in and outpatient units which was in line with the aim and objectives of the study.

There were five central hospitals listed on the NQHIP programme that were targeted. One hospital was mentioned twice in the list provided by the National Department of Health. Contact was made with all four central hospitals registered as Quality learning centres, however, due to challenges with attaining permission, only two hospitals formed part of the sample.

1.12 Ethical considerations

Ethics is a system of standards for behaviour that distinguishes between acceptable and undesirable behaviour. Due to the nature of the health sector and government matters, ethical issues related to this research can arise at every stage of this project. The study endeavoured to ensure that only voluntary participation is undertaken. All participants were asked to give an informed consent after the researcher explains aims and objectives of the study to them. Respondents can withdraw from participation at any stage. Permission will be attained from the Health Research Committee at provincial level, thereafter Institutional permission from the hospital management must be attained. The research was conducted in accordance with the Cape Peninsula University of Technology Faculty Research Committee's ethical requirements. All participant information was kept strictly confidential and anonymous and will comply with

the POPI Act. Furthermore, the ethical clearance certificate was only valid until November 2023, therefore data collection took place prior to this date.

1.13 Outline of the research study

Chapter one: Introduction

The chapter consists of the general introduction and overview of the study. It sets out the problem statement, the rationale of the study and the aim and objectives, as well as the contribution of the study to body of knowledge around quality of work life in the healthcare sector of South Africa. The chapter also introduces topics such as theories, frameworks and research methods that will be elaborated in the later chapters. The chapter ends with identifying the limitations and delimitations as well as the ethical considerations of the study.

Chapter two: Influences that have disrupted the world

The main focus of this chapter is technology-related disruptions, conflicts and wars, diseases and pandemics, climate change, and natural disasters. These concepts are noted to cause major disruptions and will be discussed accordingly under the guise of healthcare.

Chapter three: Global healthcare

The chapter provides an overview of health care sector globally and looks at possible best practices. Firstly, the concept of best practice is defined, and the sustainable development goals of Agenda 2030 is discussed. Research on the existing healthcare systems globally is then presented.

Chapter four: Service delivery in the South African healthcare sector

The chapter includes a review of relevant literature based on the South African healthcare institutions and challenges faced by frontline healthcare that may affect the quality-of-service delivered. This chapter also includes a brief overview of the NHQIP as well as information on interventions used by the South African National Department of Health (NDoH) to address the service delivery difficulties identified.

Chapter five: Schools of thought for QWL

The chapter analyses the theoretical background and conceptual framework of the study. This chapter will unpack relevant theories that were used by other authors when conducting Quality

of Work life studies. The history, purpose and uses of the quality of work life model are presented. The purpose of this chapter will be to identify if a correlation exists between quality-of-service delivered and quality of work life. Key determinants of the QWL model will be unpacked. Other studies that adopted the QWL model will be examined.

Chapter six: Research Methodology

A research design, according to Bryman (2012), is the structure that guides the gathering and examination of data in a study. The aims and objectives of the study must be considered when creating a research design. The mixed methods technique is the suitable research design that was chosen for this investigation as it enabled the adoption of both quantitative and qualitative methodologies in a single study. Triangulation was then used to combine the analysis's results, allowing the conclusions to be presented in a way that is more analytical (Wagner, Kawulich and Garner, 2012). This chapter describes the empirical study's design and details the research method, data collection instrument, and sampling procedures employed in the study. This chapter will also provide details on the reliability and validity of the study. This chapter will focus on permissions, data collection, and other pertinent information.

Chapter seven: Presentation and discussion of results

The data gathered from primary research is presented and discussed throughout the chapter utilising tables, graphs, and charts. Discussions include the quality of work life, job satisfaction, service quality, and service delivery. These variables' relationships will also be discussed. The respondents' challenges and expectations in relation to the research questions will be examined.

Chapter eight: Conclusions and recommendations

Based on the significant information mentioned in Chapter Seven, the last chapter will draw conclusions and provide recommendations. The chapter will also describe ideas that can be put in place to assist frontline personnel in dealing with the problems they face.

1.14 Conclusion

The chapter laid the foundation for the sections to follow. The problems forming the basis of this study were contextualised and described. These problems include an overall lack of funding leading to a lack of resources and staffing. The resultant challenges include high cross infection rate leading to a higher disease burden and a high number of patients that is beyond the capacity of the intuitions to deal with these challenges, ultimately leading to the apparent

inability to achieve high QWL and high service delivery levels. Thereafter, the envisaged contribution to the field of research was underpinned with the rationale of the study. Subsequently, the aims, objectives and research questions that guide this study were presented and a brief overview of the literature review, theoretical and conceptual frameworks were highlighted. The limitations and the delimitations of the study were declared before an overview of all the chapters was presented. The next chapter focuses on studying existing literature applicable to the best practices and global perspectives in the international healthcare context.

CHAPTER TWO

INFLUENCES THAT HAVE DISRUPTED THE WORLD IMPACTING ON HEALTHCARE SYSTEMS

2.1 Introduction

The previous chapter presented background information and a description of the research problem, together with the aim, objectives and research questions. The purpose of this chapter is to present literature on the influences that have disrupted the world. It is important to understand how and why the world has been disrupted because the course of human events has a profound impact on the health care sector. Despite enormous progress, several obstacles stand in the way of progress, including low rates of profit and excessive capital accumulation in certain communities; underconsumption and insufficient demand in other communities; the collapse of the global financial system; the energy and water shortage and the onset of acute environmental crisis; and a crisis of global governability. The future generation of profits and growth under the current system has been cast into doubt due to these serious issues. Given the grand scale of the challenges facing modern societies, it is unclear whether the current systems can remain stable and reproduce itself or whether humanity is on the verge of a historic shift (Heller, 2011). Even though these influences may cause disruption, not all changes need to be viewed negatively. When changes occur at a faster rate than before, daily routines are disrupted, and strategic decisions are affected.

2.2 Overview of the influences that have disrupted the world

There have been major turning points in history that have produced revolutions and disruptions on a global scale. All hopes of world peace and equality have been dashed by the financial crisis and the accompanying recession, China's relentless economic growth, and the political upheavals globally. Researchers need to understand these influences to make valuable contributions at this crucial juncture in history (Heller, 2011). Technology-related disruptions, conflicts and wars, diseases and pandemics, climate change, and natural disasters have all been structured into separate categories and discussed accordingly under the guise of healthcare.

2.3 Technological Advancement

The Industrial Revolution of the 18th century, which saw enormous scientific developments pushed the limits of capitalism, mass production and urbanisation, ushered in significant

changes in traditional practises and societal systems causing serious economic and social turbulence (Heller, 2011). In more recent times, the integration of digital technology, including telemedicine, data analytics, and electronic health records, is causing significant changes in the healthcare sector.

However, several obstacles hinder the widespread adoption of these innovations. One key challenge is the resistance to change among healthcare professionals and end-users. Many practitioners are accustomed to traditional methods and may be hesitant to embrace new technologies due to concerns about usability, data security, and disruptions to established workflows. Another major obstacle to adoption is interoperability. The efficiency of digital tools and provider collaboration may be hampered by the absence of standardised standards and smooth communication between various healthcare IT solutions. Concerns about data security and privacy are also important issues affecting the sluggish adoption of technology-driven solutions. Healthcare professionals and patients are wary of protecting private health information, which makes them reluctant to use new digital technologies. A comprehensive strategy is needed to address these issues, one that includes effective cybersecurity measures to foster trust in the digital transformation of the healthcare industry, initiatives to standardise and increase interoperability, education and training programmes for healthcare personnel (Iyanna, Kaur, Ractham, Talwar & Najmul Islam, 2022). Additionally, a lack of user training, inadequate support during the implementation process, and issues related to user-friendliness of the technology was also cited by Davis, Spohrer & Maglio (2011).

Alohali, Carton, and O'Connor (2020) takes a more sanguine view on the issue of the challenges highlighted. The rapidly changing technological world presents opportunities as well as difficulties for healthcare service providers, provided they act fast to adjust. It is impossible to overlook the impact of innovation in customer-centric design and the ongoing development of technology on service delivery paradigms. Technology and the planning and provision of services have a dynamic relationship that considers the changing needs of both patients and service providers. Technology can improve accessibility and efficiency, which changes how services are delivered and experienced (Kothari, Mohan Lal, Rao, and Young, 2022). Additionally, the integration of digital platforms, automation, and data analytics to enhance service operations and elevate overall quality of service is powered by technology.

AI has had a considerable impact on the healthcare sector, providing transformational solutions to multiple challenges and improving patient care. AI algorithms can assess medical images such as X-rays, MRIs, and CT scans, along with pathology slides, assisting in the early diagnosis of diseases such as cancer (Hunter, Hindocha & Lee, 2022) and cardiovascular disorders, as well as enhancing diagnostic accuracy and speed. Similarly, AI algorithms may analyse patient data to uncover patterns and trends, assisting in disease detection and prediction (Kumar, Koul, Singla & Ijaz, 2022).

AI speeds up drug discovery by analysing biological data, identifying potential drug candidates, and optimising clinical trial designs (Álvarez-Machancoses & Fernández-Martínez, 2019). For chronic illnesses, AI can also assist in tailoring treatment plans based on individual patient data such as genetic information, lifestyle factors and treatment response (Subramanian, Wojtusciszyn, Favre, Boughorbel, Shan, Letaief, Pitteloud & Chouchane, 2020). AI-powered virtual assistants or telemedicine can provide basic healthcare information, organise appointments, and offer prescription reminders, boosting patient participation, particularly in rural locations and with highly infectious diseases such as Covid 19. AI also enables remote monitoring of chronically ill patients via wearable devices and sensors, delivering real-time data to healthcare specialists for proactive therapies. AI reduces the administrative strain on healthcare providers by streamlining administrative duties such as billing, appointment scheduling, and record keeping for staff (Subramanian et al., 2020).

AI is used to enhance precision in surgical procedures, with robots assisting surgeons for increased accuracy and reduced invasiveness (Moglia, Georgiou, Georgiou, Satava & Cuschieri, 2021). For example, AI has enormous potential to transform comprehensive spine care. Predictive analytics based on evidence can assist surgeons enhance preoperative patient selection, surgical indications and individualised postoperative care. Although research is still in its early stages, robotic-assisted surgery has the potential to reduce surgeon fatigue while increasing technical precision. AI and machine learning (ML) have emerged as disruptive technologies with the potential to significantly alter clinical decision making. Preoperative patient workup, patient selection, and result prediction can all be aided by AI, as can spine research quality and repeatability, perioperative surgical assistance and data monitoring optimisation, and intraoperative surgical performance (Rasouli, Shao, Neifert, Gibbs, Habboub, Steinmetz, Benzel & Mroz, 2021).

AI assists in detecting fraudulent actions in healthcare billing and improves patient data security through enhanced encryption and authentication mechanisms. Large datasets are analysed using AI to discover trends and patterns in population health, assisting in public health planning and budget allocation (Kapadiya, Patel, Gupta, Alshehri, Tanwar, Sharma, and Bokoro, 2022). While AI offers many benefits, it has also raised ethical problems, such as data privacy, algorithm bias, and the need for clear regulatory frameworks to enable responsible and safe deployment in healthcare settings. Continued study, development, and collaboration among healthcare practitioners, technologists, and policymakers are essential for maximising AI's positive influence in healthcare (Telo, 2017; Abdulraheem, Adeniyi, Awotunde, Imoize, Jimoh, Oladipo & Falola, 2024).

2.3.1 Wars and conflict

Both the First and Second World Wars had a significant impact on the world, bringing about unprecedented levels of death and destruction (Garry & Checci, 2021). As a result, geopolitical boundaries changed, new technologies and tactics were developed, including the use of large-scale industrial production, aeroplanes, and weapons of mass destruction. The ongoing conflict in various parts of the world, particularly Ukraine and Russia has brought about a new set of challenges, including the rising cost of living globally, unpredictability in the food and energy supply, slow economic growth, terror and fear of people and geopolitical conflict (Goniewicz, Burkle, Horne, Borowska-Stefańska, Wiśniewski & Khorram-Manesh, 2021).

Garry & Checchi (2021) reported that 2 billion people live in unstable or conflict-affected areas. Health is impacted by armed conflicts because they cause harm to infrastructure, violence, and interruption of public health services. In order to avoid the immediate threat of conflict, food shortages, and loss of livelihood, populations flee from areas of active conflict. Approximately 60% of the 68.5 million individuals who are internally displaced due to conflict have not left their home country and are still living there. Over 191 million people died because of conflicts in the 20th century. However, civilians made up two thirds of the dead in World War 2, compared to one in seven in World War 1, demonstrating how the already compromised infrastructure is being strained as more and more civilians become victims. In battles such as in which Rhodesian forces participated in "Operation Turkey" in Sudan in the 1990s, access to food and clean water (Cronin, Shrestha, Spiegel, Gore & Hering, 2009) are purposefully denied and used as weapons of war. Curfews, sieges, blockades, and other measures that restrict

movement are examples of additional weapons of war; these were used at Tubmanburg, Liberia.

Because starvation deteriorates victims' health, contaminated water necessitates medical attention, and curfews, sieges, and blockades can induce population displacement and the spread of infections, they have a substantial impact on the healthcare business. Mobility restrictions also contribute to crowding and increases the spread of infections. Direct losses from war and conflict include traumatic disability and fatality, psychological suffering, and secondary illnesses and injuries due to gender-based sexual assault (Kane, Ventevogel, Spiegel, Bass, Van Ommeren, Tol, 2014). However, with large numbers of patients and low numbers of healthcare service delivery points, there is a higher level of communicable and non-communicable diseases and cross infection rates. Armed wars undermine the foundations of existing healthcare systems, usually leading to a recurrence of infectious diseases that can be prevented. Although non-communicable diseases account for 70% of deaths worldwide today, respiratory infections, diarrhoea illnesses, malaria, tuberculosis, and HIV/AIDS rank among the top 10 causes of mortality in low-income nations. Armed conflict increases the burden of these infectious diseases, which has much more severe long-term effects (Goniewicz et al., 2021).

2.3.2 Disease and pandemics

Diseases and pandemics have a significant overall impact on the global healthcare industry, affecting strategic planning, capacity, and resources. Additionally, pandemics and diseases have put a strain on resources due to the increased number of individuals requiring healthcare. Resources including financing, hospital beds, manpower, and medical supplies are usually under pressure. Cross-infections, longer wait times and inadequate care are outcomes when dealing with diseases and pandemics (Madhav, Oppenheim, Gallivan, Mulembakani, Rubin, and Wolfe, 2018).

In addition to causing disruptions in international supply networks, diseases and pandemics also lower consumer spending and lower overall economic activity. Healthcare organisations' funding and financial stability are impacted by this. Additionally, governments have the authority to enact new rules and regulations that put more administrative and reporting requirements on healthcare facilities. Controlling the pandemic takes precedence over non-

urgent medical operations during a pandemic which implies that funds are being shifted, which would undermine the care given to patients with other illnesses (Madhav, et al., 2018).

Even if the information above emphasises the detrimental effects that diseases and pandemics have on the healthcare industry, there might be a bright side. Managing diseases and pandemics boosts carers' expertise and encourages innovation and research. To stop the spread, scientists and medical experts may work together to create novel treatments, vaccinations, and diagnostic instruments and may result in new treatments that can be modified to suit different illnesses, as well as improvements in healthcare technology (Burkle, Bradt and Ryan, 2021).

2.3.2.1 Covid-19 and Influenza

COVID-19, one of the deadliest global health disasters in recorded history, began in 2019 in Wuhan City, Hubei Province, China, and spread in less than three months to every nation on the planet. The coronavirus known as SARS-CoV-2, which is the source of COVID-19, is mostly transmitted from person to person through respiratory droplets expelled when an infected individual coughs, sneezes, talks, or breathes. Additionally, the virus spread by coming into contact with infected surfaces and then contacting the face—more specifically, the mouth, nose, or eyes. COVID-19 manifested with a range of symptoms, from mild respiratory issues to severe pneumonia, acute respiratory distress syndrome (ARDS) and multi-organ failure. Certain populations, such as the elderly and those with underlying health conditions were more vulnerable (Ciotti, Ciccozzi, Terrinoni, Jiang, Wang & Bernardini, 2020; Lone & Ahmad, 2020). Current estimates indicate that COVID-19 has killed 6,959,316 people worldwide (WHO,2023) as compared to the 1918–1919 Spanish flu pandemic, which killed 50–100 million people worldwide (Aassve, Alfani, Gandolfi & Le Moglie, 2021).

The World Health Organization (WHO) declared it a pandemic on March 11, 2020, when the Covid-19 pandemic quickly became a worldwide public health disaster with international travel playing a considerable role in the global spread of the virus (Madhav et al., 2018). Infected individuals who travelled between countries carried the virus with them, contributing to outbreaks in various regions. The highly contagious nature of the virus, combined with global interconnectedness, facilitated its rapid transmission. Different countries were at different phases of the outbreak due to the virus entering them at different times (Lone & Ahmad, 2020).

Overworked healthcare institutions had to employ drastic measures in an attempt to contain the virus. Efforts to control the spread of COVID-19 involved implementing public health measures such as lockdowns, social distancing, mask-wearing, testing, contact tracing, and quarantine. These measures aimed to slow down the transmission of the virus, reduce the burden on healthcare systems, and protect vulnerable populations. The pandemic led to a shift in healthcare priorities, with a significant focus on managing and mitigating the impact of COVID-19. Non-urgent medical procedures and elective surgeries were often postponed, allocating resources to pandemic-related needs (Madhav, et al., 2018).

The global healthcare community witnessed an unprecedented acceleration in research and vaccine development. The collaborative efforts of scientists, pharmaceutical companies, and governments resulted in the rapid development and distribution of COVID-19 vaccines. The scientific community collaborated extensively to understand the virus, develop treatments and share information. Extraordinary efforts led to the rapid development of COVID-19 vaccines. Multiple vaccines were authorised for emergency use, providing hope for controlling the spread and severity of the virus (Graham, 2020). Even as vaccination efforts progressed, the pandemic's long-term effects on public health, economies, and societal norms continued to unfold, emphasising the need for ongoing vigilance and adaptation. The need for social distancing and the surge in demand for healthcare services led to a rapid adoption of telehealth and virtual care solutions. The shift allowed for remote consultations, monitoring, and healthcare delivery, reducing the risk of virus transmission (Pfefferbaum and North, 2020). Schools and universities globally faced closures and disruptions to in-person learning, prompting a shift to remote and online education (Pokhrel and Chhetri, 2021).

Many healthcare systems faced overwhelming challenges with shortages of medical supplies, hospital beds, and ventilators. Healthcare workers experienced heightened workloads and faced increased risks of infection. Lockdowns and restrictions led to economic downturns, job losses, and disruptions in various sectors. The pandemic highlighted and exacerbated existing social inequalities. Disparities in access to healthcare, resources and vaccines became more pronounced, with certain regions and populations facing greater challenges in managing and recovering from the pandemic. In many regions, healthcare systems faced unprecedented challenges as hospitals and healthcare facilities became overwhelmed with COVID-19 cases with the surge in patients strained resources, including beds, ventilators, and personal protective equipment (PPE). Healthcare professionals faced immense challenges, including

increased workloads, burnout, and exposure to the virus. Staff shortages and the need for specialised training in handling COVID-19 patients further strained the healthcare workforce (Madhav, et al., 2018 and Pfefferbaum and North, 2020).

The pandemic had significant mental health implications with increased stress, anxiety, and depression observed globally. The pandemic took a toll on mental health globally, affecting both the general population and healthcare professionals. Increased stress, anxiety, and depression underscored the importance of addressing mental health as an integral part of overall healthcare (Pfefferbaum and North, 2020).

Certain 'flu' strains, such as the Severe Acute Respiratory Syndrome (SARS) in 2002–2003 and the H1N1 virus in 2009–2010, also spread swiftly over several countries and had a high death toll. Prioritising immunisations and good hygiene to prevent infections has become more important as the healthcare systems' burden has grown. The COVID-19 pandemic significantly impacted the global healthcare system, prompting changes in priorities, accelerating technological advancements and highlighting the importance of global collaboration in addressing health crises (Madhav, et al., 2018).

The COVID-19 pandemic marked a transformative period in modern history, prompting global collaboration, resilience, and adaptation across various sectors to address the multifaceted challenges it presented. In addition, the crisis prompted innovation in healthcare delivery, such as the development of new treatment protocols, diagnostics, and data-sharing initiatives. Lessons learned from the pandemic are likely to influence future healthcare system resilience and adaptability (Ciotti et al., 2020; Lone & Ahmad, 2020 and Pokhrel & Chhetri, 2021).

2.3.2.2 Tuberculosis (TB)

Tuberculosis remained the leading infectious pathogen-related cause of death in 2019. However, Covid-19 moved TB down the rankings in 2020. In 2019, an estimated 10.0 million people globally contracted (TB), with an estimated 1.2 million TB-related deaths among HIV-negative people and an additional 208, 000 deaths among HIV-positive people. Of those with TB, 88% were adults and 12% were children. The highest rates of tuberculosis were seen in the WHO regions of South-East Asia (44%), Africa (25%), and the Western Pacific (18%). Two thirds of the total worldwide was made up of eight countries: South Africa (3.6%), Nigeria

(4.4%), Bangladesh (3.6%), Indonesia (8.5%), China (8.4%), the Philippines (6.0%), Pakistan (5.7%), Nigeria (4.4%), and India (26%) (Chakaya, Khan, Ntoumi, Aklillu, Fatima, Mwaba, Kapata, Mfinanga, Hasnain, Katoto & and Bulabula, 2021).

TB has significant implications for the global healthcare sector due to its widespread prevalence, impact on public health and the challenges associated with its prevention, diagnosis, and treatment. TB places a substantial economic burden on healthcare systems worldwide. The costs associated with TB prevention, diagnosis, and treatment, as well as the economic impact of lost productivity due to illness and death, contribute to the overall strain on healthcare budgets. The healthcare systems of many countries with high TB burdens face challenges in allocating resources effectively. TB requires sustained investment in healthcare infrastructure, laboratories, trained personnel and a reliable supply of medications. Competing health priorities may limit the resources available for TB control efforts. TB disproportionately affects low and middle-income countries, contributing to global health inequality. Limited access to healthcare services and poverty, lifestyle factors contribute to the higher prevalence of TB in certain regions. Addressing TB requires addressing broader social and economic factors (Silva, Arinaminpathy, Atun, Goosby & Reid, 2021).

The rise of drug-resistant TB strains, such as multidrug-resistant TB and extensively drug-resistant TB, pose a substantial challenge for healthcare systems. Treating drug-resistant TB is more complex, costly and time-consuming, requiring specialised drugs and expertise. TB often coexists with other health issues, such as HIV/AIDS. Co-infections can complicate diagnosis and treatment, requiring a comprehensive and integrated approach to healthcare. Additionally, TB can lead to long-term health issues, further impacting healthcare systems (Bedingfield, 2023).

Controlling TB requires robust public health measures, including active case finding, contact tracing, and effective infection control. Implementing these measures necessitates a coordinated effort among healthcare providers, public health agencies, and communities. The global healthcare sector needs ongoing research and development efforts to improve diagnostics, develop new drugs and enhance vaccines for TB. Innovation is crucial to overcoming challenges such as drug resistance and improving the efficiency of TB control programmes. TB is often associated with stigma, which can hinder efforts to diagnose and treat the disease. Addressing the social and cultural aspects of TB is an essential component of

comprehensive healthcare strategies. TB needs to be treated as a global emergency to reduce the number of infections effectively and quickly (Chaisson, Frick & Nahid, 2022).

2.3.2.3 Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS)

HIV/AIDS has been prevalent since the 1980s globally and has had a multifaceted impact on the global healthcare sector, affecting epidemiology, treatment complexity, resource allocation, health inequalities, prevention strategies, global collaboration, research, maternal and child health and long-term health management. With over 36 million people living with HIV and over 39 million deaths attributable to HIV/AIDS to date, HIV/AIDS continues to have a devastating impact on people's health throughout the world. Approximately 2 million people contract HIV annually, despite considerable innovations in antiretroviral therapy and global progress towards the implementation of treatment-as-prevention strategies. In retrospect, assessments of the HIV burden are essential to the evaluation of control strategies. Future HIV burden estimates are crucial for directing resource allocation and optimising policy in the long run (Pandey & Galvani, 2019).

HIV/AIDS has disproportionately affected marginalised and vulnerable populations, exacerbating existing health inequalities. Stigma, discrimination and social determinants of health contribute to disparities in access to healthcare services and outcomes. The virus has a particularly significant impact on sub-Saharan Africa, where a substantial portion of the population may be living with HIV. High prevalence rates in certain regions strain healthcare systems and resources. HIV/AIDS is a chronic condition that requires lifelong treatment. The complexity of antiretroviral therapy regimens, potential side effects and the need for strict adherence present challenges for healthcare providers and patients alike (Armoon, Higgs, Fleury, Bayat, Moghaddam, Bayani, and Fakhri, 2021). Ensuring a consistent and adequate supply of antiretroviral drugs is critical (Anakwa, Teye-Kwadjo & Kretchy, 2021). HIV/AIDS can impact maternal and child health, with the risk of mother-to-child transmission during childbirth or breastfeeding. Prevention of mother-to-child transmission programmes are crucial to reducing the impact on infants and ensuring their well-being (Funk, Yoshida, Zhao, Boucheron, Van Holten, Chou, Bulterys, & Shimakawa, 2021).

HIV/AIDS often coexists with other health issues, such as tuberculosis. The synergistic impact of HIV and other infections can complicate diagnosis and treatment, requiring an integrated healthcare approach. The financial burden of managing HIV/AIDS is substantial. Healthcare systems must allocate resources for testing, prevention programmes, treatment, and ongoing care. Competing health priorities such as dealing with the COVID-19 pandemic, malaria and tuberculosis outbreaks can limit resources allocation to HIV/AIDS and can pose challenges for sustained and effective HIV/AIDS programmes (Chanda-Kapata, Ntoumi, Kapata, Lungu, Mucheleng'anga, Chakaya, Tembo, Himwaze, Ansumana, Asogun, & Mfinanga, 2022). HIV/AIDS prevention involves comprehensive strategies, including education, condom distribution, needle exchange programmes and access to pre-exposure prophylaxis Programme. Implementing and sustaining these prevention measures require ongoing efforts from healthcare providers and public health agencies (Pandey & Galvani, 2019).

Because of the global worldwide nature of the HIV/AIDS epidemic, international collaboration and partnerships have emerged. The Global Fund to Fight AIDS, Tuberculosis and Malaria, as well as the President's Emergency Plan for AIDS Relief (PEPFAR), are examples of such initiatives which demonstrate the need for coordinated efforts to address the impact of HIV/AIDS globally. The quest for an HIV vaccine and ongoing research into new treatment modalities are essential components of the healthcare response to HIV/AIDS. Advances in research and innovation contribute to improving treatment outcomes and reducing the overall burden of the disease. As people with HIV/AIDS are living longer due to improved treatments, healthcare systems must adapt to the long-term management of chronic HIV infection and includes addressing aging-related issues, comorbidities and mental health concerns (Chang, Rusu & Kohler, 2021; Zakumumpa, Paina, Wilhelm, Ssengooba, Ssegujja, Mukuru, & Bennett, 2021).

2.3.2.4 Ebola

The healthcare systems have been severely impacted by other diseases like Ebola in West Africa (2014–2016). Numerous resources are needed for prevention, treatment and ongoing care, however there are difficulties to contain outbreaks and provide appropriate care due to a lack of infrastructure, resources and medical professionals. The Ebola virus is a deadly disease which historically, outbreaks have been concentrated in Central Africa, notably in areas

surrounding the Ebola River, where the virus was discovered (Jacob, Crozier, Fischer, Hewlett, Kraft, Vega, Soka, Wahl, Griffiths, Bollinger and Kuhn, 2020).

Ebola outbreaks have been sporadic, mainly affecting countries in Central Africa, such as the Democratic Republic of Congo (DRC), Uganda, Sudan, and others. The outbreaks have varied in size and intensity. In the years leading up to 2022, there were several outbreaks, with the DRC experiencing multiple occurrences. Response efforts, including vaccination campaigns and improved surveillance, have been crucial in containing and managing outbreaks (Jacob et al., 2020).

Ebola outbreaks often overwhelm local health care systems, especially in countries with limited resources. The sudden surge in cases can strain healthcare facilities, leading to shortages of beds, medical supplies and personnel. The focus on Ebola response can disrupt routine health services such as vaccination programmes, maternal and child health services and treatment for other diseases. Disruption can lead to increased morbidity and mortality from other preventable and treatable conditions. The global health community often diverts resources to address Ebola outbreaks and can strain resources for addressing other health issues and emergencies.

Ebola outbreaks trigger international responses, involving organisations such as the World Health Organization (WHO), non-governmental organisations (NGOs) and various governments. The international community, including organisations like the World Health Organization (WHO) and various NGOs, have been actively involved in supporting affected countries and enhancing global preparedness for Ebola and other emerging infectious diseases. However, the World Health organisation was criticised for falling short regarding leadership capabilities (Wenham, 2017). Advances have been made in developing vaccines for Ebola. The rVSV-ZEBOV-GP vaccine, for example, has shown efficacy in clinical trials (Huttner & Siegrist, 2018) which was proven to be a significant development in the prevention and control of Ebola outbreaks. There has been increasing recognition of the importance of a ‘One Health’ approach, which involves collaboration between human and animal health sectors to prevent and control diseases like Ebola that can affect both humans and animals (Sikakulya, Mulisya, Munyambalu, & Bunduki, 2020).

Collaborative efforts aim to contain the outbreak, provide medical assistance and prevent the spread of the virus to other regions. Ebola outbreaks can lead to stigma and fear within affected

communities and globally, resulting in social and economic repercussions, affecting trade, travel and the overall well-being of communities. Each Ebola outbreak provides valuable lessons for improving the response to future outbreaks, including refining strategies for case identification, contact tracing, community engagement, and international collaboration (Jacob et al., 2018).

2.3.2.5 Malaria

Malaria is a contagious disease that is spread by mosquitos and affects people and animals. Plasmodium falciparum, Plasmodium vivax, Plasmodium ovale, Plasmodium malariae, and Plasmodium knowlesi are the parasites that cause the vast majority of human malaria cases. Malaria is prevalent in most of Africa, Asia, and South America. Malaria cases and deaths are disproportionately high in Sub-Saharan Africa. Malaria is a major source of disease and mortality worldwide. Children under the age of five, as well as pregnant women, are at a higher risk of severe results. Malaria claimed the lives of 435,000 people worldwide in 2017 and afflicted an estimated 219 million people (Talapko, Škrlec, Alebić, Jukić & Včev, 2019).

There have been extensive global efforts to control and eliminate malaria. Organisations such as the World Health Organization (WHO), the Global Fund, along with various governments, NGOs, and research institutions, work towards reducing the transmission of the disease. These organisations supply endemic countries with funding, technical assistance, and resources. Ongoing research aims to develop new tools for malaria control, including more effective drugs, vaccines, and innovative mosquito control strategies (World Health Organization, 2020).

Insecticide-treated bed nets, indoor residual spraying, and antimalarial medicines are all used to prevent malaria. Efforts are also made to control the mosquito vectors that transmit the disease. Various antimalarial drugs are used for both treatment and prevention. However, the rise of drug-resistant strains of the malaria parasite is a concern and underscores the need for ongoing research and development. Research into malaria vaccines is ongoing, with some progress made in recent years. The development of an effective malaria vaccine could significantly impact worldwide efforts to control and eradicate the disease (Dhiman, 2019).

The COVID-19 pandemic has had implications for malaria control efforts in, as resources were redirected to address the new public health crisis which has raised concerns about potential setbacks in the fight against malaria thus highlighting the interconnectedness of global health challenges showing that malaria and other diseases have far-reaching implications for global healthcare, affecting individuals, communities, and healthcare systems. Efforts to control and eliminate malaria require a multi-faceted approach involving international collaboration, research, preventative measures and sustained investment in healthcare infrastructure (Heuschen, Lu, Razum, Abdul-Mumin, Sankoh, Von Seidlein, D'Alessandro & Müller, 2021).

Malaria affects not only individuals but also has economic consequences. The illness can lead to absenteeism from work and school, reducing productivity and economic growth in affected areas. Endemic regions often face a strain on healthcare facilities due to the high number of malaria cases. The strain can affect the ability of healthcare systems to address other health issues adequately (Singh, Saha, Chand, & Sabin, 2019).

Changes in climate patterns can influence the distribution of malaria vectors (mosquitoes), affecting the spread of the disease. Climate change mitigation and adaptation strategies are essential components of long-term malaria control. Variations in climatic conditions have an impact on human health by raising morbidity, mortality, and disability rates as well as causing diseases to spread to previously non-endemic areas. Specifically, diseases including dengue, malaria, hantavirus pulmonary syndrome, salmonellosis, cholera and giardiasis that are spread by insect vectors and contaminated water may be affected by climate change. Changes in temperature, precipitation, wind, sunshine and other climate variables are included in climate change. These changes can affect hosts, vectors, diseases and their living conditions by changing the hosts' and pathogens' ability to survive, reproduce, or spread (Cella, Baia-da-Silva, Melo, Tadei, Sampaio, Pimenta, Lacerda, & Monteiro, 2019).

2.3.3 Climate change

Climate change disrupts the world in numerous ways, impacting various aspects of the environment, ecosystems and human societies. Rising greenhouse gas emissions are thought to be to the blame for a variety of societal problems, including poor nutrition, infectious and non-infectious diseases and water security concerns. The average global temperature is rapidly

rising, and the atmospheric CO2 concentration has crossed 400 parts per million as the greenhouse effect intensifies (Mikhaylov, Moiseev, Aleshin & Burkhardt, 2020).

Global temperatures are rising because of the build-up of greenhouse gases in the atmosphere, resulting in heatwaves, changing weather patterns and changes in species distribution (Weilnhammer, Schmid, Mittermeier, Schreiber, Jiang, Pastuhovic, Herr & Heinze, 2021). Temperature rise causes a decrease in agrarian land productivity, desertification, biodiversity loss, ecosystem degradation, freshwater resource depletion, ocean acidification, and stratospheric ozone depletion. Agricultural resources will eventually be impacted by global warming due to reduced water availability, altered and reduced arable land, increased pollution and hazardous material accumulation in the food chain (Mehmood, Bari, Irshad, Khalid, Liaqat, Anjum & Fahad, 2020).

Extreme weather phenomena such as hurricanes, droughts, floods, and wildfires are also becoming more frequent and intense as a result of climate change. These disasters can inflict significant devastation, population dislocation, and loss of life. Melting polar ice caps and glaciers, as well as seawater expansion as it warms, contribute to increasing sea levels, posing a hazard to coastal communities by causing erosion, increased floods, and the potential for land loss (Weilnhammer et al., 2021). Moreover, changes in temperature, precipitation and other environmental conditions can threaten the survival of many species. Some may struggle to adapt or migrate to suitable habitats, leading to shifts in ecosystems and potential extinctions. Increased carbon dioxide levels in the atmosphere also result in higher levels of CO2 being absorbed by the oceans leading to ocean acidification, which negatively impacts marine ecosystems, particularly coral reefs and shell-forming organisms (McNeil & Matsumoto, 2019).

Climate change can exacerbate existing social and economic inequalities. Vulnerable populations, particularly those in developing countries, may face increased challenges in terms of food security, water availability and exposure to extreme weather events. Climate change can affect human health directly through heat-related illnesses and indirectly by influencing the spread of infectious diseases, such as those carried by vectors like mosquitoes.

Changes in climate conditions can contribute to population displacement as people seek more habitable environments leading to increased competition for resources and potentially

contribute to social and political tensions. Addressing and mitigating the impacts of climate change is a global challenge that requires concerted efforts in reducing greenhouse gas emissions, adapting to changing conditions and promoting sustainable practices across various sectors (Heshmati, 2021).

Natural disasters, ranging from storms and droughts to floods and earthquakes, affect a million people each year. However, we are not powerless against them, and the number of deaths globally has dropped, owing primarily to floods and droughts. Natural disasters can have a large impact, even if they only cause a small percentage of deaths worldwide. This is especially true for people that are already vulnerable in low- to middle-income countries that lack the infrastructure needed to appropriately protect and respond. It is critical that we understand the frequency, magnitude, and repercussions of natural disasters in order to improve our preparedness and protect people's lives and means of subsistence (Ritchie & Rosado, 2022).

2.3.4 The economic and social environment

Economic and social conditions play a significant role in shaping the stability and well-being of societies around the world. Disruptions in these conditions can have far-reaching consequences, affecting individuals, communities and nations in various ways. The global economic and social environment has had a significant impact on the healthcare sector, resulting in several disruptions (Smith, Machalaba, Seifman, Feferholtz, & Karesh, 2019).

High levels of poverty and inequality can lead to social unrest and discontent. When a significant portion of the population lacks access to basic resources and opportunities, it can result in protests, conflicts and political instability. Economic downturns and budget cuts have put pressure on healthcare funding, leading to reduced investments in infrastructure, equipment and research (De Juan & Wegner, 2019) resulting in challenges in delivering quality healthcare services and hindered the development of new treatments and technologies. The rapid advancement of technology has both positively and negatively impacted the healthcare sector. While innovation has improved patient care, increased efficiency and expanded access to telehealth services, it has also created challenges related to data privacy, cybersecurity and the digital divide. Advances in technology can bring about rapid changes in industries and job markets, leading to unemployment and social dislocation for those unable to adapt.

Additionally, issues like the digital divide can exacerbate social inequalities (Moro Visconti & Morea, 2020).

Economic recessions or downturns can lead to widespread unemployment, causing financial hardships for individuals and families which can contribute to increased crime rates, mental health issues and strained social services. Aging populations, rapid urbanisation and shifting disease patterns have placed additional strain on healthcare systems. The rising prevalence of chronic diseases requires long-term care and management, increasing the demand for healthcare services and resources. Economic and social disruptions spurred by pandemics and disease outbreaks can cause job losses, social isolation and increased stress levels have had a profound impact on mental health. The healthcare sector has been faced with the task of addressing and treating an escalating need for mental health services (Karabag, 2020).

Economic challenges and social instability in one region can prompt large-scale migration and displacement of populations which can lead to social tensions in both the areas of origin and the receiving communities, as resources and job opportunities become strained. Socioeconomic disparities have widened, affecting access to quality healthcare. Economic disruptions have led to more people being uninsured or underinsured, making it difficult for them to afford necessary treatments and medications resulting in exacerbated healthcare disparities, especially for vulnerable populations. When people feel that their economic needs are not being addressed, they may become disillusioned with the political system, leading to protests, demonstrations and even revolutions. Economic inequality, social injustice and lack of access to resources can fuel social unrest and conflicts. Conflicts can range from civil unrest to full-scale wars, disrupting entire regions and causing humanitarian crises.

Economic activities often contribute to environmental degradation, leading to long-term consequences such as climate change, resource depletion and natural disasters. These environmental disruptions can exacerbate existing social and economic challenges. Events like pandemics can have profound economic and social impacts. The COVID-19 pandemic, for example, led to widespread health issues, economic downturns and disruptions in education and social interactions. Global economic disruptions and changing trade policies have impacted the healthcare supply chain, leading to shortages of essential medical equipment, medications and supplies, highlighting the need for resilient and diversified supply chains to ensure the continuous availability of critical healthcare resources (Karabag, 2020).

Economic and social changes can also impact cultural practices and identities. Globalization, for instance, can lead to cultural homogenization, eroding traditional practices and creating identity crises. Unequal access to education can perpetuate social and economic disparities. Lack of educational opportunities can limit individuals' potential and contribute to a cycle of poverty. Addressing disruptions requires comprehensive and coordinated efforts from governments, international organisations and civil society. Strategies may include policies to promote economic development, social justice, and environmental sustainability, as well as investments in education, healthcare, and infrastructure (Usman, Jahanger, Makhdum, Balsalobre-Lorente & Bashir, 2022).

A vibrant, productive society depends on its members being in good health, whereas fear and sickness can hinder work, consumption, leisure, travel, and general well-being. Although non-health sectors are frequently taken into account when discussing the negative externalities that contribute to disease events, their potential effects from illness events make it necessary for them to participate in the search for multi-sectoral solutions to lower and control disease risks. The widespread and far-reaching effects of pandemics are similar to those of earlier calamities (Smith et al., 2019). In response to these disruptions, healthcare systems have had to adapt by implementing innovative strategies, embracing telemedicine, investing in digital health solutions, and promoting equitable access to healthcare services. The challenges presented by the global economic and social environment have underscored the importance of resilience, flexibility, and collaboration within the healthcare sector.

2.4 Conclusion

This chapter began with a summary of the global disruptions and then examined each one through the lens of the healthcare industry. Changes brought on by technology, armed conflicts, pandemics and illnesses, including discussions on the Covid-19 pandemic, HIV/AIDS, TB, Ebola, and malaria were discussed. Natural disasters and climate change were also covered.

It is crucial to remember that while disruptive influences can lead to positive change and progress, they can also cause destabilisation and negative consequences. The way societies respond and adapt to these influences often determines their long-term impact. The pandemic's economic and health repercussions have quickly exploded into a series of interconnected catastrophes. As the world economy recovered from the pandemic, carbon emissions increased. The war in Ukraine has turned food and energy into weapons, causing inflation to increase to

heights not seen in decades, globalising a crisis of the cost of living, and igniting social unrest. The ensuing change in monetary policy signals the end of an economic period characterised by easy access to inexpensive debt and will have significant effects on governments, businesses, and people, deepening inequality both within and across nations (World Economic Forum, 2023). The global healthcare perspectives will be highlighted in the next chapter.

CHAPTER THREE

GLOBAL HEALTHCARE PERSPECTIVES

3.1 Introduction

This chapter will highlight best practices in the healthcare industry globally. Examining healthcare systems around the world will provide guidance regarding what best healthcare systems look like and how they operate. Such best practices will be crucial when evaluating South Africa's healthcare system and contrasting it with those around the world, keeping in mind how Agenda 2030's Sustainable Development Goals (SDG) are accomplished.

3.2 Global healthcare

All citizens should have access to healthcare services regardless of their location, social status or income as it is their human right. However, studies have reported that there are citizens who experience difficulties in accessing healthcare. Findings from studies are discussed in the next section and provides insights on healthcare experiences globally. Hashemi, Wickenden, Bright and Kuper (2022) assert that people with disabilities in high, low and middle-income countries experience poor access to healthcare because of inaccessible and discriminatory environments. For example, in Malawi, disabled people experience major challenges including the high cost of accessing healthcare, communication challenges and poor attitudes of healthcare workers towards them. Some people experience a lack of availability of suitable transport due to hilly terrains and flooding rivers during the rainy season. While these challenges are not unique to disabled people, it is worth noting that people with disabilities are amongst our most vulnerable population and require more help. Facilities are inaccessible for disabled people while health care workers are not trained to deal with people with disabilities leading to issues of stigma and discrimination. To overcome this, disabled people should be provided with assistive devices or cost-effective transport solutions to get to suitable facilities to receive treatment. Implementing inclusive outreach services targeting people with disabilities may prevent the need for people with disabilities to travel to receive treatment. Furthermore, training healthcare workers to create an accessible and disability friendly service environment should be a key priority (Munthali, Swartz, Mannan, MacLachlan, Chilimampunga, Makupe, 2019).

Similarly, in rural Namibia people living with disabilities are facing issues of high cost of transport, high cost to pay for treatment an inadequate toilet facilities. People with lower limb

disabilities are particularly affected as the distance is too far to walk for treatment (Van Rooy, Amadhila, Mufune, Swartz, Mannan, MacLachlan, 2012). In South Africa, a considerably higher proportion of people with disabilities did not receive needed health treatment. People with impairments also have negative perceptions towards the competency of health care personnel. Because of their larger health demands, the disabled population is less satisfied with services, indicating a lack of access for people with disabilities in South Africa's rural poor areas (Vergunst, Swartz, Hem, Eide, Mannan, MacLachlan, Mji, Schneider, 2019).

Improvement to sexual and reproductive health and rights of women with disabilities is increasingly acknowledged and is at the forefront of reform in Ghana. Women with disabilities face several barriers when accessing treatment related to sexual and reproductive health. Such barriers include physical social and financial barriers. Visually impaired women in the Ashanti and Brong Ahafo Regions of Ghana are unable to access treatment for sexual and reproductive health (Badu, Gyamfi, Opoku, Mprah, and Edusei, 2018).

Asylum seekers and refugees face major challenges in accessing and using healthcare in European countries. Various legal, linguistic, administrative and knowledge barriers exist. Of recent, asylum application numbers have peaked, and the high numbers of asylum seekers and refugees have put a strain on healthcare facilities leading to inequity an inadequate care. Refugees and asylum seekers may understand how the healthcare system works in the European Union. Legal barriers may lead to a break in treatment and a lack of coordination between healthcare providers in the arrival countries making specialist care difficult (Nowak, Namer, and Hornberg, 2022). Continuity of treatment for migrants and refugees who have important health needs is also a challenge because of the inequalities faced. Health care delivery to this patient group has demanded some public health attention in high income countries (Brandenberger, Tylleskär, Sontag, 2019).

In Kerala, India, significant improvements have been made in the prevention and treatment of diseases, however inequity in access to services is always a concern as benefits are not equally shared. Research by George, Davey, Mohanty, et al., (2020) indicate that large indigenous communities have been excluded from or face a lack of access to health care services. Further research showed that the indigenous communities are financially protected and are offered the services free of charge. However, the community very rarely makes use of the healthcare system provided to them. They also resist all attempts by the healthcare system to improve their

access. They cited reasons of discrimination and a failure to provide culturally respectful care to the community. Due to the centralisation of delivery of services, it is difficult for the healthcare system to change its offerings at community level. However, health systems stakeholders have recommended meaningful engagement of the community and the local health system. Indigenous health traditions inhibit acceptance of contemporary healthcare. The lack of efforts to integrate traditional beliefs into the contemporary healthcare system has led to resistance from communities. Traditional medicines, superstitions, connection to ancestors have inhabited the ability after locals to trust the public health care system. Integration, education and acceptance by both parties is important to ensure that respectful and culturally safe health outcomes are achieved, that will ultimately lead to improved health outcomes for indigenous communities. However, there is still limited efforts to integrate traditional beliefs around healing, death and connection to ancestors into the health system's approach to providing services proving stigmatisation of traditional medicines (George, Davey, Mohanty, et al., 2020).

China is one of the countries that has had great success in incorporating traditional medicine goods into its healthcare systems. However, there were no standardised procedures in place to manage these items' market access. To decide whether to include or exclude these products, health departments depend on historical data and expert judgements. The National Healthcare Security Administration (NHSA) of China, as well as allied ministries such as the National Medicinal Product Administration (NMPA) and the National Health Commission (NHC), adopted policies and procedures to reform market access rules in order to manage market access. A total of 1315 traditional medicines are currently covered by approved National Basic Medical Insurance, Work Injury Insurance, and Maternity Insurance. Drug, thereby increasing accessibility and embracing traditional forms of medication (Xia, Yao, Lai, et al., 2022).

In 2020, The Commonwealth fund released international profiles of 20 healthcare systems (Tikkanen, 2020). The profiles highlighted how the concepts of accessibility, affordability, quality of care, integration of services and a focus on prevention come together to create systems that can deal with challenges proactively. High quality healthcare services should be affordable for all citizens and must be provided at a reasonable cost. An excellent healthcare system must be able to meet each of these criteria in a timely and affordable manner while prioritising patient safety and high-quality care. Ultimately what constitutes the best health care

system will depend on individual preferences and priorities. A few countries with high performing healthcare systems that were mentioned in the report will follow.

Singapore has consistently achieved extraordinary results in the provision of high-quality healthcare. They are also able to control the cost of healthcare effectively. Haseltine (2013) identified three compelling qualities that contribute to this exceptional successful healthcare system: long-term political unity, the ability to recognise and establish national priorities, and a consistent desire for the country's collective well-being and social harmony.

There is a high degree of unity amongst the various ministries that exist in Singapore making it easier for policy development and implementation. The ministers work as a team and understand interdepartmental cooperation. They understand that every aspect of life including housing, water supply, food supply, air quality, waste disposal, road traffic, parks, tree planting affect the healthcare system. Therefore, the government of Singapore has woven health priorities into various sectors of government such as urban planning. The initial priority was to put in proper sanitation procedures to control infectious diseases, then provide clean water, develop a vaccination programme and guarantee access to basic medication and clean food.

A sense of responsibility is also instilled in patients, where they are made aware of how much they are spending on healthcare. A network of satellite outpatient dispensaries are available closer to the people which offer immunisation, wellness programmes, nutritional advice, psychiatric counselling, dental care, x-rays and home nursing. In essence, Singapore's healthcare system has a good reputation because the government has invested heavily in healthcare by developing comprehensive healthcare programmes with advanced medical facilities, highly trained healthcare professionals and strong emphasis on preventative care.

There are government regulations which mandates compulsory health savings accounts for all citizens and centralised electronic medical record systems which facilitates efficiency of service translating to the reduced waiting times and timely access to care. The intensive preventative care programmes which promote regular screenings and immunisations allow for early detection of health issues and swift treatment by highly trained healthcare professionals (Ministry of Singapore, 2019; Haseltine, 2013; Tikkanen, Osborn, Mossialos, Djordjevic and Wharton, 2020).

Similarly, the Canadian healthcare system focuses on preventative care, high standards of quality and safety and is known as a country with a strong tradition for medical research and development. Healthcare professionals are encouraged to use latest technologies and treatments to provide the best possible care for their patients. The Canadian government believes that investing in preventative health care may reduce healthcare costs in the long run as healthcare professionals treat health issues before they become serious. Canada has a publicly funded healthcare system that provides coverage for all citizens and residents. Healthcare services are available to everyone regardless of their ability to pay. While there can be long waiting times for certain types of non-emergency procedures, the system is generally well regarded for accessibility and affordability. Other countries that have a strong emphasis on preventative care wellness programmes include Switzerland and Germany (Tikkanen, Osborn, Mossialos, Djordjevic and Wharton, 2020).

As demonstrated in the preceding discussions, healthcare challenges exist globally. Some governments have devised ways to ensure that all citizens, regardless of their personal circumstances, have access to quality healthcare. Countries should work together to help their partners achieve equal, affordable and accessible healthcare. Countries that are distressed by problems in healthcare might benefit from the successful countries by researching and implementing the techniques that they have used.

3.3 Sustainable Development Goals (SDG'S)

The United Nations Assembly adopted the Agenda 2030, which contains a list of 17 Sustainable development goals (SDGs) in 2015 to serve as a benchmark for the establishment of a global best practice set of standards (Aftab, et al., 2020). The overall aim of these goals is to end poverty, protect the environment and ensure that all people enjoy peace and prosperity by 2030. Global organisations such as the World Health Organisation (WHO) and United Nations Children's Fund (UNICEF) partner with humanitarian and funding agencies to assist countries to achieve the goals set (Weber, Chun, Le, He, Benzakour, Zaharieva, and Islam, 2021).

SDG3 focuses on ensuring healthy lives and promoting the well-being of all people without discrimination by strengthening healthcare systems however, there are aspects of all SDG's that contribute to attaining SDG3. For example, SDG2 focuses on zero hunger, SGD4 focuses

on quality education, SDG6 focuses on clean water and sanitation and SDG7 focuses on affordable and clean energy, all of which are crucial elements of a good sustainable healthcare system (Aftab, et al., 2020). SDG3 hopes to decrease the number of deaths and infections by intensifying efforts in ensuring availability of affordable treatment options and collaboration with key stakeholders in a sustainable manner. Sustainability is about conducting daily activities without exhausting available resources and preserving as much as possible for future generations. A sustainable environment is a vital part of successful healthcare systems. In recognition of this, healthcare providers globally are investing extensive resources to aid sustainable development (Moldovan, Blaga, Moldovan and Bataga, 2022).

However, researchers have reported challenges in implementing programmes that are dedicated to accelerating progress on achieving the SDGs (Aftab et al., 2020, WHO, 2022 and Weber, et al., 2021). Challenges highlighted comprise constraints on collaboration, lack of funding and human resources, a lot of competition among participating agencies, limited documentation of failures, inadequate knowledge of end users, shortfalls in working with the different governments and the need to standardise how to evaluate innovation (Yale Jackson Institute for Global Affairs, 2021). We cannot ignore that the Covid-19 pandemic has hindered the progress of attaining SDG3. However, the COVID-19 pandemic has merely exacerbated already existing issues of equity, sustainable financing, already fragile and vulnerable situations, dated data and digital health systems (WHO, 2022). Recommendations to focus on strengthening existing health systems using multisectoral approaches and get long-term commitment from all stakeholders was made in the 2022 Global Action Plan for Healthy Lives and Well-being for All report by WHO.

Aftab et al., (2022) identified similar challenges, including a lack of coordination between different levels of government and with other stakeholders, limited financial resources, a high reliance on donor support, insufficient planning and incorporation of SDGs into national planning and budgeting as well as a lack of reliable data. In response, Aftab et al., (2022) investigated the implementation of health and health-related sustainable development goals (HHHSDG) which incorporates all SDG's that are related to the achievement of SDG3. The results indicate that an integrated approach to the implementation across SDGs is required for the achievement of Agenda 2030. The most important aspect of accelerating the achievement of the SDG's is the recognition of interrelatedness of the SDG's, the availability of efficient resources, the collaboration of governments, communities and relevant sectors which will not

only strengthen multisectoral relationships but also build capacity to maintain financial sustainability and in turn contributes to issues such as the availability of data for monitoring and evaluating as well as resource availability to accelerate the implementation of HHSDGs.

According to the 2022 progress report on the Global Action Plan for Healthy Lives and Well-being by WHO, several countries have reported success.

- Pakistan has adopted a multi-agency, multi-sectoral approach to promote integrated service delivery for vulnerable communities. Gavi (The Vaccine Alliance) and The World Bank have collaborated to ensure that all people in Pakistan, particularly the underprivileged, are vaccinated and have access to the essential healthcare services.
- WHO and UNICEF teamed up to assist Azerbaijan, a mountainous rural region characterised by extreme poverty, low education levels and constraints in the healthcare workforce. WHO and UNICEF provided funding to train the primary healthcare workforce and facilitate women's healthcare awareness to reduce maternal mortality rate.
- Congo identified poor outcomes in the areas of reproductive, maternal, neonatal, child and adolescent health (RMNCAH). WHO set up and funds the H6, which is an inter-agency coordination group consisting of The Joint United Nations Programme on HIV and AIDS (UNAIDS), United Nations Population Fund (UNFPA), UNICEF, UN Women, the World Bank that assist Congo with monitoring, evaluating and managing the challenges associated with RMNCAH and COVID-19.
- Due to the large numbers of refugees, Brazil cited challenges regarding mental health in the vulnerable communities. In response, the Pan American Health Organization (PAHO) and WHO collaborated with the Brazilian Government, UN Refugee Agency (UNHCR) and The International Organization for Migration (IOM) to co-ordinate a virtual course and establish a working group to increase public awareness and assist with mental health issues.
- WHO and PAHO also teamed up to assist Costa Rica with issues around gender-based violence (GBV), supporting patients with chronic conditions and mental health. The project funded the training of 250 community leaders who can assist with these focus areas. The UNFPA was also engaged to empower women and girls of indigenous communities against GBV.

- PHC (Public Healthcare) Investment Programme of Ghana is funded by the World Bank and Global Financing Facility (GFF) to develop a Prioritized Operational Plan (POP-C) to assist the Ghanian government to increase access to essential health services in a financially sustainable manner. The focus is on zero dose children and missed communities and prioritising investments over the next ten years.
- Nepal has a decentralised health system which experiences problems with accurate data management. Accurate data plays an important role in how resources are distributed. With inaccurate data, the Nepalese government cannot make informed decisions regarding targeted health care interventions for those most in need. To tackle these challenges, the SDG Gap partners GAVI, the Global Fund, UNFPA, UNICEF, UNAIDS, WHO and the World Bank have collaborated with the Government of Nepal to build data management capabilities at all levels so that vital data are collected to enable the distribution of accurate resources.
- Kenya is also receiving assistance from the SDG Gap partner and their Ministries of Health and Interior to implement the Civil Registration and Vital Statistics (CRVS) System. The system will help capture and record information on births and deaths including rural area to enable to government of Kenya to plan better, distribute resources according to the needs of the community and monitor and evaluate progress.
- UNICEF and WHO support Sri Lanka as the PHC sector uses a multisectoral approach to promote the overall quality of life of the people. To tackle ageing and premature death, there are programmes in place to promote increased physical activity, improved hygiene and reduced waste production. There are also programmes in place to revitalise water, sanitation and hygiene facilities at schools in order to boost attendance of female learners during menstruation.
- Somalia has a high rate of fatal infectious childhood pneumonia and zero dose children. The SDG Gap partners have collaborated with Grand Challenges Canada and the Somali Ministry of Health to introduce a solar-powered oxygen delivery system and conduct campaigns to vaccinate zero-dose children.

From the above case studies provided by WHO (2022), it is evident that there is assistance available through multisectoral and co-ordinated efforts amongst all relevant stakeholders which must be monitored and evaluated indicating that there is strong collaboration and a team effort in solving common problems that are prevalent in multiple regions. In South Africa, there

very high level of medical expertise and medical research carried out placing SA at an advantage to achieve SDG's if adequate funding is available.

3.4 Defining best practice

Authors agree that best practice relates to a way of conducting their daily business so that methods and interventions used are proven to maximise efficiency. In other words, it is a set of operating procedures that is designed to improve and streamline work processes for the best possible outcomes. In the case of the healthcare sector, the healthcare institution, the employee and the patient should be satisfied with the outcomes of the treatment or intervention. Best practice in healthcare may also include aspects such as developing a strong corporate culture, investing in employee training and development, implementing effective communication protocols and maintaining high standards of quality control. Best practices are important because it helps organisations build highly effective processes for improved patient and health outcomes (Ten Ham-Baloyi, Minnie & Van der Walt, 2020; Perleth, Jakubowski & Busse, 2001).

Best practice can be presented in terms of different aspects of hospital procedures. For example, there could be a different set of best practice procedures related to using artificial intelligence for record keeping and patient monitoring (Verdejo Espinosa, Lopez, Mata and Estevez, 2021), human resource management, recruiting and retention, disease management such as Tuberculosis, Cancer and HIV. Some hospitals may also have best practices related to dealing with different types of patients such as elderly, children, foreigners, refugees and homeless. Best practice models are also associated with financial management of funds and how it is dispersed to the different departments within the institutions (Willmington, Belardi, Murante, and Vainiera, 2022).

Best practice is usually derived from a benchmarking exercise that was previously conducted to measure and compare operational and clinical outcomes against other similar institutions allowing institutions to learn from one another. Benchmarking is a common strategy that can be used to implement best practices related to quality improvement which in turn improves patient outcomes, systems performance and better professional development. Benchmarking highlights pertinent elements that reinforce enhanced performance and quality. We call these, performance indicators, which can provide simplified information about the performance of

different institutions. The healthcare sectors worldwide are increasingly using benchmarking to detect trustworthy approaches for assessing quality of patient care and institutional performance (Willmington et al., 2022).

The following best practice strategies identified by WHO (2022) provides approaches adopted by different countries that if followed and implemented can lead to successful outcomes in healthcare. Congo has created a reference document which contains all the interventions that must be carried out according to the priority needs in the healthcare sector. Documenting protocols, successes and shortcomings can be used to evaluate success of projects. For the past 15 years, Nepal uses pooled funding to adopt a sector-wide approach. Niger uses the Paris Declaration to guide and co-ordinate activities that align with the SDG's. Pakistan has adopted a centralised approach where all development partners have one National Health Sector Coordination Mechanism which are guided by a set of standard operating procedures developed by the Ministry of National Health Services. In Somalia, all projects related to development which are supported by partners are aligned to the essential package of health service delivery.

Other initiatives include Healthcare without Harm which is an international alliance of more than 1200 organisations in 55 countries that work together to transform the healthcare sector into a more environmentally sustainable industry. The organisation works to promote sustainable procurement, reduce waste and pollution and promote clean energy in healthcare facilities. Similarly, Global Green and Health Hospitals (GGHH) are also committed to reducing the environmental footprint by providing tools and resources to help hospitals measure and reduce their greenhouse gas emissions, reduce waste and promote sustainable procurement. Additionally, The Lancet Countdown on Health and Climate Change is a collaboration between academic institutions and the World Health Organisation which tracks the progress on health and climate change. The initiative provides an annual report that assesses the health impact of climate change and tracks progress on climate change mitigation and adaptation measures.

Benchmarking and best practice are useful tools that can be used to compare different healthcare systems and institutions to bring out the best service quality. The next section will highlight the performance indicators for good healthcare systems and institutions in the world

which are underpinned by benchmarking and implementation of best practice standards which may give direction to South Africa.

3.5 Performance indicators for good healthcare systems

When classifying healthcare systems, it is difficult to rank which is the ultimate one as there are various performance indicators that contribute to an excellent healthcare system. While some healthcare systems might do well regarding high quality of service delivery due to the availability of the latest technology, it may not be affordable for the population it serves. It is purely a matter of perception and individual needs (Müller, Oakley, Saad, Mokdad, Etolhi, Flahault, 2021).

In 2000, the WHO World Health report ranked healthcare systems globally. It was heavily criticised for being too narrow focused, using a limited set of general indicators which omitted crucial indicators pertinent to the health sector, such as clinical excellence, social determinants of health, environmental factors and individual behaviour which placed some countries at a disadvantage (Müller, Oakley, Saad, Mokdad, Etolhi, Flahault, 2021). The report's methodology was criticised for its reliance on subjective measures such as national expert opinions rather than objective data which made it difficult to compare and rank countries accurately. Some critics argued that the report did not adequately represent the health needs and concerns of developing countries particularly those in Africa and Asia. There was an overemphasis on market orientated solutions such as privatisation and deregulation, rather than public sector solutions that could address systemic issues. The report's rankings and league tables were criticised for their potential to be misinterpreted and misused by policymakers leading to inappropriate policy responses. However, it must be noted that despite these criticisms, that report was also widely praised for its contribution to the global health debate and for its innovative approach to measuring the performances of different health systems. It sparked an important discussion on how to improve health systems around the world and helped to focus attention on the need for more equitable and sustainable health care strategies (Schütte, Acevedo, Flahault, 2018; McKee, 2010; Jamison and Sandbu, 2001). The discussions regarding the South African contexts will appear in Chapter Four. Understanding the contents of the report and the reasons for the criticism will allow healthcare systems to learn from the shortcomings.

Pufahl, Zerbato, Weber and Weber (2022) investigated the most appropriate process modelling for healthcare systems. According to the report, healthcare processes are a collection of organisational and medical tasks carried out in unison in order to deliver medical treatment to one or more patients. The study also pointed out that while specific aspects of healthcare procedures give rise to specific modelling challenges, there are critical areas that need to be prioritised in order to succeed in the healthcare sector. The critical focus areas are highlighted below:

- Patient centeredness - The key component of any interaction in a healthcare facility is the patient and not a document that needs to be completed or an item used to treat an ailment. The patient must be actively involved in therapy and care decision making.
- Time Management - treatment and diagnosis must be done within a reasonable time frame, subject to the availability of resources, hospital regulations and patient conditions.
- Intensive decision making - When a decision is made regarding the treatment and care for patients, it must be stored in a data management system to facilitate information exchange and transformation of tasks. Where digital information systems are not available, paper documents and other medical devices are acceptable. Most importantly the decision must be recorded to prevent any future complications or delayed treatments.
- Multidisciplinary - healthcare facilities should have a range of different specialists, treatments and resources available to provide the best possible treatment as well as the ability to present different treatment options to patients.
- Resource intensive - healthcare facilities are extremely dependent on resources, therefore scarce and expensive resources such as medical specialist equipment and rooms that are shared amongst departments must be properly managed and optimised.

In line with literature, accessibility, affordability, quality of care, integration of services and a focus on prevention were highlighted as key components of high performing healthcare systems.

3.6 Conclusion

The notion of best practice was established in this chapter in light of Agenda 2030's sustainable development goals. It was discovered that SDG3 cannot be viewed in isolation because the fulfilment of other SDGs is interconnected with SDG3. Case studies from various countries were studied and summarised under the heading "Global Perspectives" to highlight how dynamic the healthcare environment is. With an understanding of the global healthcare situation, the following chapter will highlight difficulties that present in the South African context.

CHAPTER FOUR

SERVICE DELIVERY IN THE SOUTH AFRICAN HEALTHCARE SECTOR

4.1 Introduction

The previous chapter reviewed existing literature based on global healthcare. This chapter will highlight how the healthcare sector functions with regards to service delivery in a South African context and will begin with an examination of the structure of South African healthcare systems and will provide an overview of the role of human resources in the sector. Thereafter, service delivery and the challenges experienced by healthcare workers will be examined. The chapter will finally provide a summary of current interventions that were implemented to overcome the challenges identified.

4.2 The Healthcare sector in South Africa (SA)

Through the Bill of Rights, the South African Constitution guides the content of all laws and policies. Section 27 of the Constitution states that everyone has the right to health care and that no one can be denied emergency treatment. Furthermore, when it comes to health care, the government must uphold the right to health care by providing fair and reasonable access. The government must also safeguard and promote the development of frameworks to ensure that individuals have access to health care (The Constitution after Republic of South Africa, 1996).

The healthcare sector in South Africa is divided into public and private sector. While the private sector enjoys the freedom of charging high rates to their patients, the public healthcare sector has been an object for scrutiny over the past 30 years. According to Maphumulo and Bhengu (2019), the highly fragmented and discriminatory nature of the healthcare sector during the apartheid regime is the source of challenges and is linked to historical inequalities (Sithole and Mathonsi, 2015).

The WHO (2018) emphasised the value of acknowledging the presence of both governmental and nongovernmental sectors in a country. The private healthcare sector in SA has seen substantial growth which was a market response to the declining standards in the public domain. People with medical insurance prefer to utilise the private health sector due to the availability of highly skilled health care providers, accessibility and no time wasting. In this

light, we can agree that the private sector has been assisting government to fulfil its constitutional mandate to the people of SA. However, non-governmental hospitals render services to less than 15% of the population as private sector access is only provided to people who can afford to pay. Additionally, private health care sector provides primary healthcare to only 28% to 38% of the population. In contrast, the government health care sector caters for a higher percentage of the population (Jiyane, 2020; International Citizens Insurance, 2023).

In SA public health care is available to all citizens for free even if they do not have any formal health insurance plans (South Africa, 1996). However, public health is characterised by low quality, longer waiting periods and crowded conditions. The public healthcare sector is decentralised and is organised into three levels which are national, provincial and local government (Maphumulo and Bhengu, 2019). Moreover, funding is also separated according to three levels. There is a decentralised distribution of funds from government to local municipalities, giving local public health agencies independence over allocation of funds (Expatica, 2023).

Additionally, the South African public healthcare system is divided into three levels of health services. Primary care facilities are the first point of contact for patients which provides an initial assessment of the patient. The first level is the primary healthcare clinic. These primary care clinics and are mostly staffed with nurses providing community health services. The second level are the district hospitals where patients can be tested, and minor procedures can be performed here. The third level which is much bigger in terms of technology and infrastructure are the tertiary, central and specialist hospitals where advanced technologies are available for major surgeries and specialist treatments. Only patients with serious conditions are referred to the tertiary/central/specialist hospitals. These hospitals have been designated to handle larger numbers of patients with more complex health issues due to its involvement with training, research and innovation. The third level typically receives additional funding from government (NDoH, 2012) due to the larger numbers of patients and the costs associated with specialised medical treatment and care.

4.3 National Health Insurance (NHI)

With the National Health Insurance (NHI), South Africa aims to achieve universal health coverage to ensure that everyone in the country, including families and individuals, have access

to high-quality medical care regardless of their socioeconomic situation. The Reconstruction and Development Programme (RDP), the Constitutional mandate based on Section 27 of the Constitution, and the 1997 White Paper for the Transformation of the Health System are the sources of the movement towards Universal Health Coverage (UHC) through implementation of NHI. The action is also supported by the National Development Plan's (NDP) Vision 2030, which states that by the year 2030, everyone shall have equitable access to health care of a comparable standard, irrespective of income. In accordance with the National Development Plan's (NDP) Vision 2030, all South Africans, including immigrants, would have access to free and equitable health care, regardless of their socioeconomic situation, through the creation of a shared fund for private and public health providers (Young, 2016; Heunis, Mofolo & Kigozi, 2019; Michel et al., 2020; WHO, 2018).

The NHI was to be implemented in 3 phases over a 14-year period (Mukwena and Manyisa, 2022). Phase 1 (2012–2017) consisted of testing and developing systems and processes to guarantee the effective running of the health system. Phase 2 (2017–2022) concentrated on developing mechanisms and practises to ensure the effective management and operation of the NHI Fund and Phase 3 (2021–2025) signals the completion and implementation of the Medical Schemes Act and the NHI Act by introducing the prepayment for authorised private hospitals and specialised treatments.

In 2019, a trial implementation was carried out, and the pilot districts' responses to it were conflicting. The evaluation study for the NHI Phase 1 pilot project in South Africa suggested that the healthcare system is broken and needs to be fixed. Other difficulties include an absence of governmental will, a lack of human and financial resources, a lack of coordination and communication, and the absence of monitoring systems at the time of execution. Public hospitals in South Africa are experiencing problems like an increase in illnesses and a lack of funding and employees to manage the project which is aggravated by the prevailing situation in most government-funded healthcare institutions, which is marked by inadequate management, a small budget, mediocre infrastructure and a lack of pharmaceuticals, as recorded in several studies (Maphumulo and Bhengu, 2019; Malakoane et al., 2020). The difficulties reported in the public healthcare sector by both employees and patients, as well as the fact that public institutions are plagued by a lack of funding, poor infrastructure, a lack of training, delays in development, and poor technological advancements, cast doubt on the

readiness for the implementation of the NHI (Mukwena & Manyisa, 2022; Heunis et al., 2019; Michel et al., 2020).

While the NHI presents a chance to level the playing field for public sector healthcare providers to draw medical tourists, it is important to note that the obstacles prevent the plan from being implemented quickly, necessitating extra interventions and collaboration.

4.4 A Global health care perspective

To achieve institutional goals, healthcare systems must be reinforced by a capable and committed workforce. Workers are the most integral element of the healthcare sector as they are primarily in charge of the delivery of services (Doherty, 2014). The accomplishment of the healthcare system is mostly dependent on the knowledge, skill and motivation of the employees. Thus, healthcare organisations should be spending considerable effort and resources for employee recruitment, selection and retention of qualified, attentive, proactive, and dedicated workers (Nayak, Sahoo and Mohanty, 2018). Although healthcare workers are a vital component of the healthcare system, their importance in ensuring optimum functionality of the healthcare system is often overlooked (Muthuri, Senkubuge and Hongoro, 2020). The healthcare employees work in the frontlines of the system, and they work diligently to ensure that patients heal by providing care and comfort which aids the recovery of the patients (Nayak et al., 2018).

South Africa has a robust medical insurance industry which supports a strong private sector boasting state of the art facilities, high levels of expertise displayed by healthcare professionals, high accessibility and no time wasting for those on a medical aid scheme. Similarly, India has a healthcare system that proactively promotes the private sector to reduce the service gaps of public sector. Interesting findings from research conducted in India by Nayak et al. (2018) expose that the private sector is unregulated leading to the private health care units exploiting the system. In the absence of regulations, private healthcare institutions hire untrained, unqualified and unorganised workers, and because there are no regulations to follow, the healthcare workforce in India is plagued by heavy workload, workplace hazards, occupational stress, limited career growth, and low pay. Instances in which simple chores are delegated to nurses and paramedics, while specialist doctors handle only complex treatments. These personnel make up more than half of the workforce in private healthcare units, demonstrating

the importance of the frontline healthcare worker's role. Wong and Laschinger (2015) agree that the frontline position is a vital part of a successful system (Doherty, 2014) however adds that clinical leadership is also important.

Frontline clinical workers experience constant job demands and work stresses and therefore effective leadership may contribute to positive work environment and better staff and patient outcomes. The role of the frontline clinical manager is to develop safe and healthy work conditions and optimise staff and patient care outcomes. Clinical workers are any health professional who is directly involved in diagnosing a patient's ailment, deciding on the treatment, overseeing and participating in the care of the patient, including conducting procedures (Doherty, 2014). Placing nurses and doctors in this category seems fit. These two job roles function together to achieve clinical goals. On the one hand, the hospital manager functions in a more administrative role and usually does not play a role in clinical aspects of the operation. While hospital managers do not make clinical decisions, they do play a key role in clinical governance and assist to facilitate work on a managerial level regarding finances, supply chain, maintenance of infrastructure, hiring and recruiting. Both the clinical managers and hospital manager work with a senior management team which include a human resources manager, finance manager and a systems/administrative manager. The nursing hierarchy is overseen by a nursing services manager while the medical manager, oversees all other health professionals (Doherty, 2014; Kumah, Ankomah, and Antwi, 2016). Interesting to note is that the South African healthcare sector in mainly nurse-based and the shortage of staff is mostly felt at the nursing level (Maphumulo and Bhengu, 2019).

Informed by the reviewed literature, there are various clinical frontline positions apart from the doctors in the healthcare sector. There are different positions which may be referred to as different names at different institutions in different countries, but it can be summarised as follows:

- Registered nurses - provide patient care, administer medication, check vital signs, assist with diagnostic tests and procedures.
- Licenced practical nurses - provide basic medical care such as administering medication and changing dressing and they work under supervision of registered nurses.
- Certified nursing assistant - provide basic patient care such as bathing, grooming and feeding patients. They work under supervision.

- Medical assistant - may perform administrative and clinical tasks which include scheduling appointments, recording patient history and performing basic medical procedures like checking blood pressure of the patient.
- Physician assistant - they work under the supervision of physicians and provide diagnostic, therapeutic and preventative health care services.
- Nurse practitioner - provides primary and specialised healthcare which includes diagnosing, treating illnesses, ordering an interpreting diagnostic tests and prescribing medication.
- Pharmacist - dispenses the medication to patients as per prescription.
- Radiologist - assists with diagnostic imaging.
- Ward nurses - most often do not have postgraduate clinical training but assist the registered and licenced nurses. They work under supervision.
  (Doherty, 2014; Vijayasarathi and Khosa, 2020; Kumah et al., 2016).

In the private sector of India, doctors may shed their tedious responsibilities to the nurses and paramedics, so they get to focus on complicated tasks (Nayak et al., 2018). In contrast, in the rural district hospitals of South Africa, frontline clinical staff share enormous responsibility due to the unavailability of trained doctors. The frontline clinical workers of rural district hospitals in South Africa not only deal with the care of individual patients but they are also responsible to develop staff and services at primary and hospital level taking on great decision-making responsibilities. These decisions range from healthcare priorities to resource allocation depending on the seniority of the position. Additionally, depending on their personalities and interests, clinical staff also play several informal leadership roles (Doherty, 2014).

Some frontline non-clinical positions that are essential for the smooth operation of the institution include employees working in the administration department of the institution who are responsible to greet the patients, answer the telephone, schedule appointments and manage patient records. Other administrative duties which require liaison with the patient include registering the patient, maintaining patient records and ensuring that payments are received. Maintenance and cleaning are responsible for maintaining the physical infrastructure of the hospital including cleaning, repairing and maintaining equipment and facilities and they regularly meet patients. Security staff are responsible for ensuring safety and security of the patients, staff and visitors at the institution and they regularly encounter patients. Staff working

in the food services department often take orders from the patient for their next meal and serve the food to the patient (University of Missouri, 2023).

4.4.1 Critical skillset of frontline healthcare workers

Scholars agree that frontline healthcare workers have a unique skillset that may vary depending on the department of employment. Healthcare workers are held accountable for decisions and actions that directly influence human life, and there is no space for error. Therefore, having the right set of skills and competencies will ensure that the job suits the worker. Healthcare workers need to be aware of protective measures against a disease, understand that their job includes trauma management and that circumstances change so keeping up with new developments is necessary. Acknowledging and recognising expectations as well as the willingness to protect oneself against disease, deal with indirect trauma with high levels of professionalism while staying motivated is crucial to job satisfaction which influences institutional performance. Healthcare personnel should feel more empowered and compassionate towards others (Korkmaz, Kazgan, Cekic, Tartar,Balci and Atmaca, 2020).

Taking the above into consideration, Vijayasarathi and Khosa (2020) cite versatility, flexibility and ability to deal with crisis and important skills for radiologists. Particularly during the COVID-19 pandemic, willingness to rapidly redeploy workforce where they were needed as well as doing other duties apart from imaging required a great amount of flexibly from radiologists. In some cases, versatility was important as radiologists were required to intubate or clinically assist critically ill patients while also doing their normal duties. Even in non-crisis settings, radiologists should be educated to interpret all sorts of general imaging. Similarly, when elective operations and outpatient diagnostic tests are cancelled owing to public policy or patient fear, flexibility is essential.

Crisis such as periods of uncertainty/destabilisation, threats to the existence of the system, and a potential for escalation of errors may be extremely stressful for frontline healthcare workers. Therefore, during a crisis, the workers must persevere, adjust and speedily recover to diffuse the situation with minimum negative impact to the patient and the institution (Vijayasarathi and Khosa, 2020). Proper training will increase preparedness and confidence of workers when dealing with crisis (Bala et al., 2022).

Dohan, Green and Tan (2017) describe the competency of technology-related skillsets as crucial to the ability of an institution to innovate and adopt new technology to enhance productivity and remain competitive. In the study by Dohan et al., (2017) data elicited from paramedics indicated that technology application skills, information processing skills and understanding of the workings of technology significantly impacted learning, integrating and coordinating activities to ensure that the institution meets its goals. Skills such as rapid diagnosis and positive treatment processes add value to the healthcare system and can be harvested with the implementation of proper training programmes. These programmes are found to boost confidence, increase professionalism and promote teamwork (Bala, Yerra, Katkuri, Podila and Animalla, 2022).

The nature of the job of frontline healthcare workers requires them to have strong problem-solving and decision-making skills. Korkmaz et al's. (2020) study on the stress levels, quality of sleep, QWL and problem-solving skills in healthcare workers employed for COVID-19 services reveals that the environment in which the healthcare worker functions may be stressful. When considering the results presented in the study by Korkmaz et al. (2020) it is important to bear in mind that the study took place during the pandemic which was a very stressful and busy time for healthcare workers. Additionally, target population were employed in the outpatient clinics or emergency departments which intensified workloads and led to extreme working hours which can lead to stress. The attempt to cope with a stressful work life may result in the development of psychiatric disorders, which may impact healthcare workers' attention, understanding, and decision-making capacity, have a long-term effect on their well-being levels, and negatively affect their quality of life. Anxiety and sleep disturbances have a negative impact on healthcare workers' problem-solving skills and lower their quality of life. From this study, it can be presumed that resilience can be cited as a critical skill in coping with stress and high levels of anxiety as a frontline healthcare worker (Korkmaz et al., 2020).

The literature by Fotaki (2015), confirms that frontline workers are necessary for the delivery of high-quality health care not only in times of crisis. They must possess a range of critical skills and competencies to effectively provide care to the patients. Clinical knowledge and expertise as well as the ability to apply this knowledge to diagnose and treat a wide range of medical conditions is obvious. Moreover, the ability to effectively communicate with patients, families and other healthcare providers with compassion (Fotaki, 2015) is essential as the ability to communicate health information in a clear, short and empathetic manner is an integral

part of the job. Frontline workers are also required to have great critical thinking and problem-solving skills as they must be able to quickly assess the conditions of patients and make informed decisions about their care. They must also be able to adapt with changing circumstances and think creatively to find solutions to complex problems.

Documenting patient information, administering medication correctly and following established protocols and procedures require frontline healthcare workers to have technical skills and pay careful attention to detail. It is also important to understand and respect the cultural beliefs and practises of the population they are serving as some populations are culturally sensitive (George et al., 2020). Being able to work as part of a team and collaborating with other healthcare providers to provide coordinated and comprehensive care, requires healthcare workers to be accountable (Mukinda, Van Belle and Helen Schneider, 2020) and cooperative accepting of protocols and procedures. Providing health care can be emotionally challenging and front-line healthcare workers must be able to cope with the stress and demands of the profession. They must also prioritise their own self-care, mental wealth and maintain their physical and emotional well-being. Overall, frontline healthcare workers must possess a strong combination of technical, interpersonal, emotional skills to thrive in a highly demanding environment and ensure a high quality of service delivery to patients (Wright, Gabbay, Le May, 2022).

It is important to note that employees from other service industries such as hospitality may possess the same soft skillset required to provide excellent service delivery. The hospitality industry and the hospital industry must collaborate in providing relevant training to hospital staff. Furthermore, there are opportunities for hospitality graduates and professionals to enter roles linked to patient experience like as directors, managers, housekeeping, kitchens, food service, and patient experience consultants to share their expertise and enhance their portfolios (Zsarnoczky-Dulhazi, et al., 2023) which may alleviate the leadership challenges experienced.

4.5 The challenge of service delivery in public healthcare in South Africa

Understanding the crucial role that the South African public health care sector plays in the health and well-being of its citizens is crucial because the public sector serves majority of the population (Galal, 2022; Jiyane, 2020). In the healthcare industry, service delivery refers to the process of providing a service to a patient in order to meet their requirements and expectations.

A thorough awareness of the patient's needs and expectations, as well as the ability to create and deliver a service that satisfies those needs in a timely and effective manner, are required for effective service delivery (Transparency International Global Health, n.d) and may involve the use of technology and streamlined delivery processes that make it convenient for the patient. Similarities are noted when compared to the general service industry, one of the key components of service delivery is customer service which involves providing support and assistance to customers (patients) throughout the delivery process (assessment and treatment) from the initial contact (emergency or primary healthcare provider) to post-sales support (sending patient home with medication and care instructions) which may involve answering questions, addressing concerns and dissolving any issues in a timely and effective manner (El-Haddad, et al., 2020).

Another important aspect of service delivery is quality control which involves ensuring that the service meets the customers' expectations in terms of quality, reliability and consistency which may involve conducting regular audits, gathering patient feedback and making improvements to the service based on this feedback (Jackson, 2021). There is overwhelming evidence that the quality of health treatment in South Africa is being jeopardised as a result of the numerous issues that healthcare personnel encounter. There are numerous attempts underway to improve service delivery quality in order to eliminate errors, reduce treatment delays, increase efficiency, and provide people with high-quality healthcare at lower costs.

Media reports, official reports and communities have reported that the health department has failed to meet elementary criteria of healthcare and patient expectancies (Maphumulo and Bhengu, 2019). Despite the enormous efforts from government, challenges experienced in the public health care sector include lengthy waiting times, resource and staff shortages (Malakoane et al., 2020). In response to the scrutiny, the government has put in place various programmes over years to improve the way that the healthcare sector operates. Such initiatives also included implementing changes in health policy and legislation to ensure compliance in providing high quality healthcare. Nevertheless, challenges are still experienced which has caused a loss of confidence in the healthcare system in SA (Maphumulo and Bhengu, 2019).

Numerous quality enhancement strategies and policies were designed and implemented. The Constitution of the Republic of South Africa 1996 makes provisions for the Patient's Rights Charter, which set a general standard for attaining awareness of the rights of patient as per the

Constitution. The National Department of Health is mandated to coordinate the implementation of the policies arising from these rights. However, upon research, it was found that many institutions do not comply with the minimum standard set out calling for the establishment of the Council for Health Service Accreditation of South Africa (COHSASA).

Founded in 1994, COHSASA is a non-profit organisation that aims to promote quality in healthcare services through an accreditation procedure. It was established in 1995. COHSASA collaborates with healthcare facilities in South Africa and around the world to review and enhance patient care quality and safety. The organisation provides healthcare facilities with accreditation, quality improvement and training services to ensure that they satisfy worldwide quality and safety standards. The Hospital Association of South Africa (HASA) founded COHSASA in conjunction with South African physicians, the World Health Organisation and the United States Agency for International Development. COHSASA has worked with approximately 600 private and public healthcare institutions including hospitals, clinics, sub-acute care facilities, and hospices. There are now 67 health care providers that hold full accreditation from COHSASA (COHSASA, 2022).

Additionally, the National Department of Health (NDoh) developed the Ten Point Plan strategic framework which formed part of the hospital renewal programme. The programme focuses on improving the quality of service delivered by implementing improvement in hospital infrastructure, technology and administrative management which is delineated in the Negotiated Service Delivery Agreement signed by the Minister of Health. Moreover, the National Core Standards (NCS) which is used as a benchmarking tool to assess quality of service delivery is developed by the Office of Health Standards Compliance (OHSC). It focuses on 7 core areas which are patient rights and safety, clinical governance and care and clinical support services, leadership and corporate governance, operational management, public health and facilities and infrastructure (Maphumulo and Bhengu, 2019). These seven core areas are the very basis of the challenges.

A disquieting observation is that challenges in service delivery in the healthcare sector is fast becoming a worldwide phenomenon as described in Chapter Two. Also noted in section 3.2, SA's public healthcare sector is divided into 3 levels: primary, secondary and tertiary health care. Primary Health care services are offered at community level through community outreach help centres, clinics and mobile health units. The services include health promotion, disease

prevention and basic curative care. Secondary healthcare services are provided at district hospitals and include specialised care such as surgery obstetrics and gynaecology. Tertiary healthcare services are provided at academic hospitals and specialised medical facilities and include highly specialised care such as organ transplants and cancer treatment (NDoH, 2012). By examining each level, it can be concluded that challenges affect all levels of healthcare, and no level should be excluded from any interventions and all levels are equally important. However, challenges may be experienced differently at each level. For example, tertiary health care service providers may have a greater need for advanced technology than primary healthcare service providers. The progress in restructuring the South African Healthcare sector to ensure equality in service delivery is slow. The first step taken was to decentralise the healthcare system and was meant to reduce the strain on central facilities by strengthening local facilities with negotiation power for resources to previously disadvantaged groups. However, this method was criticised by authors as it seems that funds are being re-directed to other spending based on political priorities (Maphumulo and Bhengu, 2019).

High quality service delivery requires the management of resources such as staff, equipment, materials and time to ensure that the service is delivered in a cost effective and efficient manner. Activities may involve scheduling and coordinating staff, ensuring that equipment is properly maintained and operated and managing inventory and supplies. Inadequate finance is one of the most serious difficulties confronting the South African healthcare sector. The government devotes a sizable share of its budget on health care, but this amount is insufficient to meet the needs of an ageing population. According to the World Health Organisation (2018), SA spends approximately 8.1% of its GDP on healthcare which is lower than average when compared to other countries.

According to statistics, South Africa has over one million unauthorised migrants (ENCA, 2022). Moreover, after 1994, the freedom of movement of all South Africans led to a huge influx of people moving to urban areas leading to a strain on the healthcare facilities which is only designed to cater for a specific number of patients. Facilities are obliged to provide healthcare and cannot turn away patients as quality health care is a constitutional right. Hence, overcrowding, lack of resources and substandard amenities such as toilets and bathrooms are a norm (Maphumulo and Bhengu, 2019).

Due to shortage of funding, the South African healthcare sector also faces a shortage of resources including medical equipment, medication add medical supplies. The shortage is particularly intense in rural areas where access to healthcare is limited. The lack of resources impacts on the quality of care that patients receive and puts a strain on healthcare workers who have to work with limited resources. Resultant issues include poor hygiene standards, delayed treatment for patients and sometimes even the death of patients (Maphumulo and Bhengu, 2019; Lee at al., 2006). Shortage of funding also means that any renovations or improvements are delayed or neglected. Aged and inadequately maintained infrastructure and poor disease control and prevention practices have been cited as some of the shortcomings. Furthermore, poor waste management, lack of hygiene and poor maintenance of the building, facilities such as toilets and equipment are contributing factors to poor infection control (Maphumulo and Bhengu, 2019). Moreover, South Africa is facing a huge energy crisis, and the SA healthcare is also affected. No electricity hinders many processes in the hospital as with normal society. Blackouts infringe of the basic human rights as majority of the processes from water supply to computers do not function.

The Charlotte Maxeke Academic Hospital in Johannesburg which is recovering from a fire that occurred in April 2021, reported that although there are generators, the hospital has reported instances where the generators did not kick in immediately leading to instances where resuscitations were done with nurses and doctors turning on their torches on their mobile phones. There were instances of loss of life due to equipment being damaged because of the numerous times that it switches on and off. MRI equipment and incubators which are very expensive to procure was also damaged with loadshedding. Ventilators, infusion pumps and oxygen also depend on electricity (ENCA 2022 and ENCA 2023).

Additionally, load shedding impacts on the water supply as the water within the hospital is dependent on pumps not just gravity. There is no hot water for bathing patients. Airconditioning is important to control infections which also require electricity. Computers do not switch back on immediately so access to patient records such as blood tests is restricted leading to delayed treatment or retesting which wastes resources. Surgical procedures are delayed or cancelled and, in the case, where emergency surgical procedures are delayed due to loadshedding, loss of life is inevitable (ENCA 2022 and ENCA 2023). Chris Hani Baragwanath hospital cancelled 900 operations due to lack of maintenance, broken machinery and lack of

clean linen because the boiler malfunctioned in the state laundry and procurement limitations did not allow the hospital to use private partners (ENCA, 2022).

There are many discussions around exempting the hospitals from loadshedding. To date 76 hospitals were exempted, with the Limpopo healthcare system reporting that all hospitals in Limpopo have generators. However, it also means that additional funding to the healthcare sector is required as hospitals need to procure generators and have money for diesel and/or install solar panels. Besides this, additional security for the extra equipment must be procured because of the high levels of theft. Generators and other energy equipment has a life span and will require regular maintenance (ENCA 2022 and ENCA 2023).

Dr Tim De Maayer, a doctor at The Rahima Moosa hospital, reported in May 2022 that children were being intubated and CPR was being administered using the light of mobile phones and that the hospital was unable to conduct an urgent computerised tomography scan of a brain because the scanner had been broken for nearly three months. Due to loadshedding, the response time from laboratories performing blood tests is more than 24 hours, resulting in delayed treatment of critically ill children and a preterm infant became blind due to a lack of a functional metre (costing less than R1,000) to monitor her oxygen delivery. The hospital's CT scanner is being repaired slowly and generators are undersized for running the hospital during load shedding. Also, water cuts led to the spread of infections, and the state of the hospital toilets was shocking (Pijoos, 2022 and Gon, 2022).

Shortage of equipment could lead to fatal delays as in the case of the above-mentioned scenarios with delays in urgent surgery or delayed diagnosis leading to further complications. Material resources, apparatus and materials such as glucometers for checking blood glucose and needles for lumbar puncture in investigating or diagnosing meningitis are in short supply and results in a longer hospital stay for the patients leaving a low number of beds available for new patients needing medical assistance. In some cases, the scan machines are available at the facility however they are not in working order, meaning that patients are transferred to other facilities to use the scan machines for diagnosis, placing a strain on the receiving facility. Furthermore, the diagnosis and treatment of the patient is delayed.

Apart from a shortage of equipment that is directly linked with patient care, support staff also experience a lack of administrative equipment and technology to support the healthcare

professional, meaning that delays in paperwork and record keeping is imminent. Poor record keeping can lead to unnecessary delays, lost patients' files, lost medical history, delayed diagnosis and delayed treatment. Delayed treatment may lead to further complications and could sometimes be fatal, leaving room for litigation and loss of credibility and revenue for the facility. South Africa is experiencing a sharp rise in medical malpractice litigation leading to large compensation pay-outs resulting in a strain on the health budget. Moreover, the South Africa Nursing Council has also reported a rise in cases of misconduct against nurses. The allegations include violation of the patients' rights.

There is currently a shortage of 62 000 nurses in South Africa (ENCA, 2023) which can be attributed to a combination of factors including low remuneration and poor working conditions leading to emigration of healthcare workers. The substandard working environment in South Africa has led to a significant brain drain of healthcare workers, particularly doctors and nurses who left the country to work in more developed countries which has left the sector understaffed and overburdened (WHO, 2023). Britain has recorded a record high in the numbers of international nurses that are being hired to address staffing shortages at UK hospitals. Almost half of their nursing workforce are recruited from other countries (Smout, 2023), namely SA. However, problems of low remuneration is also experienced in Britain. In June 2023, Sky News announced a three-day strike by healthcare workers due to low remuneration. Considering the exchange rate, South African are lured to fill the gaps in the UK healthcare system. There are also a large number of contract nurses who form part of the workforce, and they are demanding permanent positions to secure their livelihoods (Bhengu, 2022). There are regular strikes occurring by the healthcare workers in South Africa which leads to disruptions in service delivery (ENCA, 2023; Gounden, 2022; Copelyn, 2022; Metelerkamp, Ellis, Sikhakhane, Langa and Simelane, 2022).

Adding to the shortage of skilled healthcare workers in South Africa, ENCA (2023) reported that there is concern over critical nursing shortages in South Africa as Netcare, who has been training nurses since 2015 says that government limitations on private sector nursing training is to blame. Earlier, Netcare trained over 3500 nurses annually and is now restricted to training 360 nurses in 2023 and other training providers are allowed to train 800 a year. With almost 40% of the registered nurses in SA due to retire by the year 2030, the rate that new staff are being trained will be insufficient to fill the gaps. Meanwhile, in the Western Province, contract nursing staff who were working on a 3-year contract are facing job losses as the province says

that there is no money to keep them on. Furthermore, the province announced that 2362 health posts will be frozen, and recruitment will be halted due to lack of funding (ENCA, 2023).

The shortage of skilled healthcare workers puts a strain on the existing workforce leading to burnout and reduced quality of healthcare. Due to the shortage of skilled staff, there is also a shortage of time. Existing staff spend less time with patients to get through long queues. Lengthy waiting periods and poor recordkeeping are also due to the shortage of staff which is not a new problem and not unique to Africa (Malakoane et al., 2020). In 2006, the WHO reported that 57 countries had the same issue of staff shortages and by 2018 the Global Health Observatory (GHO) indicated that 17 million additional skilled staff were needed globally (Muthuri, Senkubuge and Hongoro, 2020).

A lack of skilled healthcare professionals negatively impacts the quality of care provided. Muthuri, Senkubuge and Hongoro (2020) conducted research in the healthcare sector in the six countries that form the East African Community (EAC) which are Kenya, Uganda, the United Republic of Tanzania, Republic of Burundi, Republic of Rwanda and Democratic Republic of the Congo. The authors reported a shortage of healthcare workers in this region and unfortunately it is a rising phenomenon that is adversely affecting multiple health systems. Compared to Europe, Africa has much less staff in the health sector. According to Maphumulo and Bhengu (2019), Africa has less than one healthcare worker per 1000 people, compared to ten in Europe. In addition, the allocation of healthcare professionals between the public and private sectors is unequal. In some cases, there is an adequate number of healthcare workers, but they are inadequately trained or mentally and physically drained (Maphumulo and Bhengu, 2019).

Some medical professionals such as General Practitioners and Specialists surgeons who work in the private sector also serve the public sector. Similarly, some nurses who work in the public sector, extend their services to the private sector leading to the assumption that the private sector has more resources although they are serving less of the population. The unequal allocation of healthcare personnel between the well-resourced commercial sector and the under-resourced public sector has resulted in a severe workforce shortage (Maphumulo and Bhengu, 2019). Malaysia also experiences a similar problem with their healthcare workforce however the health department of Malaysia offered 4263 healthcare workers permanent positions in the public hospitals to overcome the challenge (Noorshahrizam, 2023).

There appears to be an unequal distribution of resources in urban areas compared to rural areas (Maphumulo and Bhengu, 2019) due to the argument that there is a more concentrated population in the urban areas. If a patient requires treatment that is considered “more than basic”, they will have to be moved to an urban facility due to the availability of resources leading to delays in diagnosis and treatment. The high number of people requiring healthcare services at public healthcare facilities has forced them to operate beyond their capacity leading to issues such as overcrowding, strain on available resources and amenities such as ablution, water, staffing and food. The Chris Hani Baragwanath hospital reported that nurses are pooling money to buy patients corn on a cob for lunch (Monana, 2022). These are basic conditions that are constitutional rights of patients which the healthcare facilities cannot deny their patient.

Aside from long queues at the facilities, reports by TV news channel ENCA (2022), Charlotte Maxeke hospital reveals that there are lengthy waiting periods for surgical procedures and specialist consultations. Also, some cancer patients are affected by the lack of oncology equipment and doctors leading to long waiting periods for a diagnosis. Long waiting times expose patients to further complications and sometimes, even death (Maphumulo and Bhengu, 2019).

Unfortunate fatalities have occurred because of patients being turned away from public healthcare institutions (Maphumulo and Bhengu, 2019). Patients die waiting for help (prolonged waiting period) from specialists (staff shortages) or sometimes in the wards due to poor hygiene and poor infection control measures due to shortage of resources. These challenges are interconnected and culminate in a dire situation in need of serious repair (Maphumulo and Bhengu, 2019). South Africa has a high disease burden with a high prevalence of HIV/AIDS, tuberculosis and non-communicable diseases such as diabetes. As high disease burdens put a strain on the healthcare system, healthcare workers must manage multiple chronic conditions in addition to acute illnesses. The high disease burden also contributes to the shortage of skilled healthcare workers, as healthcare workers are often overworked and burned out which leads to increased litigation and low job satisfaction (Kakshapati et al., 2021). Global diseases including the Covid-19 pandemic and Monkeypox amongst others have highlighted the multiple shortcomings and inadequacies caused by the crumbling healthcare system in South Africa. These diseases, amongst other issues such as high maternal and child mortality, high levels of violence and injuries, cardiovascular diseases, diabetes, chronic respiratory conditions and cancer has devastated healthcare systems to the

extent that they are unable to manage the difficulties of high quality of service delivery (Maphumulo and Bhengu, 2019).

Pre-existing problems such as poor hygiene, poor infection control measures and high patient-to-staff ratios lead to a disquieting observation that patients who arrive for care at a public healthcare facility may put themselves at further risk of getting infected with some other disease or virus. Maphumulo and Bhengu (2019) referred to this as healthcare-associated infections (HAI). Overcrowding may lead to issues such as poor waste management and poor handwashing techniques, strain on aging amenities such as bathrooms, insufficient environmental cleaning, inter-hospital transfer of patients with drug-resistant infections and inadequate disinfection of medical equipment. Resultant issues include a longer and more expensive stay in hospital for the patients but an increased chance of death of patients leading to an increase in the number of litigation cases. All these issues impact on service delivery, credibility and financial standing of the facility.

4.6 Opportunities to improve service delivery

Although there are serious deficiencies in the health system such as operational defects, fragmented healthcare programmes and frontline services as well as notable discrepancies related to governance, accountability and human resources, there are also opportunities for improving service delivery (Malakoane et al., 2020). In a news report by ENCA (2023) funding cuts, mismanagement and corruption continue to plague many public healthcare institutions while private healthcare is generally well resourced, and it seems willing to help. ENCA interviewed Dr Ali Humdulay, CEO at Metropolitan Health corporate who indicated that government is collaborating with private non-profit entities such as the Gift of the Givers, The Health Foundation and the Clinton Health Access Initiative which provide support in terms of infrastructure requirements. The Dora Nginza Hospital was a recipient of such assistance where the Clinton Health Access Initiative refurbished the neo natal unit.

The Chris Hani Baragwanath Academic hospital had nearly 900 neo-natal deaths since 2020. These deaths were preventable as the cause of deaths were related to babies getting too cold in the neo natal ICU, infrastructure not supporting the needs of the ward, insufficient equipment, a supply chain problem regarding food and essential items. Partnering with Gift of the Givers, The Health Foundation and the Clinton Health Access Initiative may assist overcome these

problems (ENCA, 2023). Alternatively, increased funding for the healthcare sector is essential to improving service delivery. The government must increase funding by allocating a larger portion of the budget to health care and by exploring alternative funding models such as public private partnership. Increased funding will enable the healthcare sector to invest in infrastructure, equipment and human resources leading to improved service delivery. In the interview with ENCA (2023), Dr Humdulay also mentioned that the National Health Insurance (NHI) and utilising the centres of excellence set up during partnership initiatives with the private sector is also promising.

Investing in technology is another opportunity for improving service delivery in South Africa. Technology can be used to increase efficiency such as data management and treatment. In April 2023, healthcare workers were not paid their salaries leading to unnecessary anxiety as food security and paying for living costs were affected. The issue was attributed to a technological error which was remedied later in the month. However, this could have been avoided if the departments used proper technology to assist with payroll (ENCA, 2023).

To address the issue of hospital bed shortages, the Western Cape health department is repurposing all healthcare facilities specifically built for COVID-19 to address hospital bed shortages. The Brackenridge Gate Intermediate care facility was opened in 2020 to provide extra beds during the COVID-19 pandemic. Three years later, this facility now looks after patients who are too sick to be discharged but are strong enough to wait for treatment thus prioritise more urgent cases such as emergency cases. It is a 128-bed facility with a team of 5 doctors, physiotherapists, occupational therapists and nursing staff (ENCA, 2023). Maphumulo and Bhengu (2019) believe that there is a crisis in the management and leadership at healthcare facilities in South Africa and blamed affirmative action policies for engaging leadership that is characterised by nepotism, lenience of misconduct, lack of performance management and monitoring strategies that led to many employees disregarding the law. Linked with affirmative action is employment equity policies which aimed to bridge the remunerative gap and remove all discriminatory practices in employment, however the outcomes proved unsustainable. In implementing these policies, inexperienced, under-qualified people were appointed as leaders, widening the gap between the goals of the clinical team and the management team. Moreover, promotion happens on merit of length of service, rather than skills and aptitude which exacerbates issues of lack of accountability, corruption and misconduct. Paying careful attention ensuring ethical leadership which is characterised by accountability is key to fighting

the corruption issues that SA healthcare systems face. (Molnár, Mahmood, Ahmad, Ikram, Murtaza, 2021; ENCA, 2023). In the case of The Life Esidimeni tragedy, 144 mental health care patients lost their lives and 1,418 were exposed to torment, suffering and poor health outcomes when the government decided to end their 40-year contract with the facility resulting in patients being moved to NGO's which were ill-equipped to deal with the large numbers of patients highlighting several ethical transgression where decision makers put their own interests first. The foundation of ethical leadership in healthcare is kindness, skill and autonomy and respect for human rights which is proven to be seriously lacking in this case study (Durojaye and Agaba, 2018).

Training and providing professional development opportunities empowers staff and increases job satisfaction and commitment (Almalki et al., 2012). Bala, Yerra, Katkuri, Podila and Animalla (2022) conducted research on a group of frontline healthcare workers based on simulation training. The advantages of simulation-based education include faster diagnosis, better treatment processes, a better knowledge of professionalism, greater teamwork, and competency skills, and thus additional value to the healthcare system. Participants also benefited from simulation-based training, which provided them with knowledge about how to utilise technology properly after completing the course, enhancing their abilities and confidence. Malakoane et al., (2020) describes the development and implementation of a provincial intervention model to improve the delivery of public healthcare services in the Free State province of South Africa which assisted with monitoring and reporting. The model served as a framework and was designed to address challenges such as inadequate resources, poor infrastructure and a shortage of skilled healthcare workers. It involved strengthening primary healthcare services, improving health information systems and promoting community involvement. Malakoane et al., (2020) recommended that the model be implemented in other provinces of South Africa to improve the overall quality of health care in the country.

4.7 Conclusion

This chapter discussed the healthcare sector in the South African landscape. Research on legal structures, critical skillset and challenges and opportunities were presented to enable understanding of the requirements for smooth, high quality service delivery by frontline workers. The chapter informs other aspects of the study such as the questionnaire and methodology which will be discussed in the next chapter.

CHAPTER FIVE

SCHOOLS OF THOUGHT FOR QUALITY OF WORKLIFE

5.1 Introduction

The theoretical foundation that underpins the investigation is presented in this chapter. In developing a conceptual framework, other studies in the field of Quality of Work life (QWL) were consulted to explore the models, theories and frameworks that were used to reinforce the respective studies. A brief synopsis of the models, theories and frameworks previously used in this field of research will be presented. Thereafter, the conceptual framework will be presented based on the QWL model. The QWL model will be scrutinised and explained in detail. The goal of the chapter is to create a theoretical foundation that will inform the rest of the study. In doing so, relevant literature based on QWL in the healthcare sector will be reviewed. A brief look at QWL in other sectors will follow. The determinants of QWL reveal that favourable working conditions, job satisfaction and job commitment are interrelated and will therefore be included in the chapter.

5.2 Theoretical framework

Adom, Hussein, and Agyem (2018) define theoretical frameworks as a basis upon which all knowledge is constructed, and they offer numerous advantages to researchers. It helps with providing structure and support for the components of the dissertation and serves as the grounding base from which a conceptual framework can be emphasised. It also assists with asserting the reasons for conducting the research and provides a firm grounding for the approach that the researcher adopts.

The researcher explored various theoretical frameworks and models before deciding to use the QWL model to underpin the study. The Self-Determination theory, Job demands-control theory of job strain, Excellent Healthcare service model (EHSM), Three Pillar approach, Potential customer loss model, Person-environment fit theory, Action Learning Theory, Kanter's theory of structural power, Swanson's theory of caring, Needs satisfaction theory, Maslow's hierarchy of needs, Herzberg two factor theory, Spill over theory, The three-factor theory and the 5 Q's model will be examined in the next section as frameworks and models necessary for collating information to reach objective four of this study which is to propose a new model to promote

high quality of work life to ensure that a high quality of service is provided. Each existing model will be reviewed in the sections to follow.

5.3 Self-Determination theory (SDT)

Ryan and Deci (2017) introduced the Self-Determination Theory (SDT) in their seminal research, distinguishing between employees' intrinsic and extrinsic demands. Extrinsic work value orientations are concerned with security and material acquisition, whereas intrinsic work value orientations are concerned with self-actualisation and self-expression. The fulfilment or non-fulfilment of these demands may result in favourable or poor job consequences (Vansteenkiste, Neyrinck, Niemiec, Soenens, De Witte, Van den Broeck, 2007; Soo-Lee, Back and Chan 2015; Jackson, 2021).

According to Vansteenkiste et al. (2007), while some employees value their roles in organisations and use their jobs to chase individual benefits and make meaningful contributions to society (intrinsic), others may concentrate mainly on achieving monetary success, having control and influence over others and occupying a respected position at work (extrinsic). Additionally, Soo-Lee et al. (2015) described the ideal situation when relating SDT is when a group of self-determined employees have the independence to do what is interesting and important to them and it is fulfilling in every way. Job completion fulfils the intrinsic needs (such as recognition and praise) of the employees as well as the extrinsic needs of the employees (such as job security and economic benefits) of the employees.

According to SDT, the relationship between work values and employment results is a direct effect of how well the work values meet one's basic requirements. The greater the level of satisfaction of needs, the better work results are expected; however, if the needs are not met, negative effects are anticipated. Negative outcomes include increased emotional weariness, short-term satisfaction after achieving a goal, and a high intention to change jobs (Vansteenkiste et al., 2007).

Jackson (2021) implied that SDT can also be linked to an employee’s level of engagement and is influenced by their level of involvement which impacts on their work efficiency and can be interpreted as low employee involvement means low employee engagement which translates to low work efficiency which is closely related to the above discussion by Soo-Lee et al., (2015)

who advocates that intrinsic and extrinsic motivations of employees have considerably different impacts on job satisfaction.

The SDT is a theory that executives can use to foster a positive culture and give employees more power, leading in a more meaningful work life (Jackson, 2021) because intrinsic work value orientation is linked to higher levels of well-being and represents an employee's natural desire to actualise, develop and grow at work (i.e. self-development). including the need to form significant and gratifying relationships with coworkers (i.e., affiliation) and to assist those in need (i.e., community contribution) (Vansteenkiste et al., 2007).

Applying the principles of Self-Determination Theory in the healthcare setting can contribute to a positive work environment, enhance patient satisfaction and improve overall healthcare outcomes. By understanding and addressing the basic emotional needs of autonomy, capability, and connection, hospitals can create a culture that supports the well-being and motivation of both healthcare workers and patients. Supporting healthcare workers' autonomy involves allowing them a sense of control and choice in their work. Hospitals can promote autonomy by involving healthcare workers in decision-making processes, allowing them to have a say in patient care plans, and providing opportunities for professional development (Jackson, 2021). Additionally, respecting patient autonomy is a fundamental aspect of medical ethics. Patients should be empowered to make informed healthcare decisions by involving them in discussions about treatment options, informed consent, and care plans (Hagger & Protogerou, 2020).

Hospitals can support healthcare workers' competence by offering ongoing training and professional development opportunities (Vansteenkiste et al., 2007), helping healthcare professionals stay updated on the latest medical advancements and enhancing their skills. Acknowledging the competence of healthcare workers through recognition and constructive feedback fosters a positive work environment. Feeling competent in their roles contributes to healthcare workers' job satisfaction and well-being. Building a sense of relatedness among healthcare workers is crucial for effective teamwork. Hospitals can foster a collaborative and supportive environment, encouraging communication and teamwork among different healthcare professionals. Developing strong relationships between healthcare providers and patients contributes to a sense of relatedness. Effective communication, empathy, and understanding patient needs help build trust and enhance the overall healthcare experience. Using SDT, hospitals can create a work environment that aligns with the values and mission

of healthcare workers. The alignment enhances intrinsic motivation (Soo-Lee, 2015), as healthcare professionals are more likely to be involved and committed when their work aligns with their individual values. Helping healthcare workers see the meaningful impact of their work on patient outcomes reinforces intrinsic motivation. Connecting the tasks and responsibilities of healthcare workers to the greater purpose of improving health can enhance job satisfaction. SDT can be used to support work-life balance which is crucial for the well-being of healthcare workers. Hospitals can implement policies and practices that prioritise the mental and physical health of their staff, recognising the importance of both professional and personal aspects of their lives (Soo-Lee et al., 2015). Moreover, hospitals can use SDT principles to address and prevent burnout by promoting autonomy, competence, and relatedness which involves addressing systemic issues, providing resources for coping with stress, and creating a supportive work culture (Migliorini, Cardinali & Rania, 2019).

5.4 Job demands-control theory of job strain

Karasek's (1979) seminal research on the Job Demands-Control (JDC) model has been investigated by a number of scholars (Kain and Jex, 2010; Laschinger, Finegan, Shamian, Almost, 2001; Wong and Lachinger, 2015). It is one of the most commonly studied occupational stress models (Wong and Lachinger, 2015). Karasek's (1979) Job Demands-Control (JDC) model's fundamental assumption is that job demands can cause higher job strain or stress, which is linked to undesirable physical, emotional, and organisational results (Karasek, 1979). Furthermore, work stress can result from the combination of high job expectations and an individual's level of work control and decision-making authority over their work (Kain and Jex, 2010; Karasek, 1979).

Karasek (1979) identified a few traits that might be classified as job demands and that serve as psychological pressures at work. Job demands were classified based on the amount of work to be done, the speed and pace required to accomplish the work, the volume of work to be performed within time limits, the degree of attentiveness required, cases of competing demands, and the frequency of work interruptions or delays. According to JDC theory, job strain occurs when individuals experience high task demands yet have limited choice over how their work is completed. (Kain and Jex, 2010).

In 2015, Wong and Laschinger (2015) conducted research on frontline clinical managers who experience high workloads. The study highlighted the critical role of clinical managers in the

healthcare system indicating that the frontline clinical manager role in healthcare is essential when creating safe and healthy working conditions and ensuring the highest quality of service delivery. However, these managers face continuous job demands such as wider spans of control and complicated role obligations but may have inadequate decision-making power to support optimal work performance resulting in unwarranted job strain. Job strain experienced for long periods of time can lead to burnout and health complaints. Other repercussions may also include lower organisational commitment, higher turnover intention and absenteeism. It is expected that that managers would have higher job control of the work than lower-level staff which will lead to a higher QWL, however experiencing numerous stressors daily will inevitably bring down the QWL. Such stressors include ongoing staffing reorganisation, staff shortages and shrinking resources. Moreover, the pressures to provide quicker and better services keeps growing, Government regulatory pressures keep changing, and noteworthy time pressures keep getting tighter (Wong and Laschinger, 2015).

Experiencing such high levels of stress will affect staff performance and increase the likelihood of other problems such as burnout and health issues among nurses (Nayeri, Salehi and Noghabi, 2011). Stress can also impact on the commitment levels of nurses, such as making leaving decisions or staying in the job for many years. Furthermore, stress can have an impact on nursing care quality at all levels, including treatment outcomes for patients and health-care costs. According to research, working environment variables such as organisational conditions and occupational burnout have a significant impact on nursing productivity and QWL (Nayeri et al., 2011).

The JDC model only addresses a small portion of the highly dynamic QWL model; as a result, while the model will have an impact on some parts of the current study, if the current study uses this model exclusively, many other aspects will be overlooked. For instance, even though working in the healthcare industry might be stressful at times, there are also difficult situations that are out of control, like the COVID-19 epidemic. The literature on the JDC theory that was previously discussed may indicate that managing stress in healthcare professionals is essential to preserving a resilient and productive staff. Implementing workplace wellness initiatives, offering mental health support services, enhancing work-life balance, tackling organisational difficulties and encouraging an environment of open communication and support are a few possible strategies. Stressor identification and reduction can improve patient outcomes and the general well-being of healthcare professionals.

By implementing the aforementioned stress management techniques, burnout - which is characterised by an extended period of stress without sufficient coping mechanisms - may be avoided. Burnout is characterised by emotional exhaustion, depersonalisation, and a decreased sense of personal accomplishment. It could result in a decline in job satisfaction and, in certain situations, make healthcare professionals reevaluate their professional decisions. Particularly during pandemics, stressed healthcare professionals may be more prone to poor performance, faulty decision-making, and lower-quality patient care.

5.5 Excellent Healthcare Service Model (EHSM), Three-Pillar approach and Potential customer loss model

According to Lee, Khong, and Ghista (2006), the healthcare system should adopt a holistic system view to give high quality healthcare, which may be accomplished by considering quality, cost, and efficiency aspects. Lee et al. (2006) further advocates that the elements of quality, cost and efficiency cannot be viewed independently, and these elements are symbiotic to produce mutually beneficial outcomes. From the research one can gather that one cannot expect high quality and efficient service from healthcare workers who are getting paid a below average remuneration package. To achieve a holistic system, Lee et al. (2006) proposed the use of three different models to address each element individually.

A possible customer loss model was created to assess the impact of potential customer loss due to poor service delivery. Based on the research conducted 70% of customers who receive deficient service are unlikely to visit the establishment again. Additionally, 75% of the customers who received deficient service will tell an average of nine family members and friends and this scenario has the potential to reach 465 people who will not visit the established due to word of mouth. Therefore, this model advocates that it is important to get high quality service delivery right every single time as the repercussions of customer loss will negatively impact on the financial stance of the establishment.

A three-pillar approach was suggested to address the competitive and financially driven nature of the health care sector. The approach advocates managers should ensure that managers make informed decisions while still being customer driven. Ensuring that customers return, and that good word of mouth publicity is achieved is crucial in maintaining the financial disposition of the establishment.

The Excellent Healthcare Service Model (EHSM) was established after combining the potential customer loss models and the three pillars. According to the strategy, there is a negative impact on the industry when there is a shortfall in the delivery of service quality, thus facilities must strive to give consistent and high-quality service to guarantee financial goals are met.

5.6 The link between Person-environment fit theory, Action learning theory and Kanter's theory of structural power

The Person-environment (P-E) fit theory explains a situation in which an individual choose a job environment that matches their own goals, interests, and values. The decision is influenced by the type of organisation and the working conditions available (Zaman, Ansari, and Chaturvedi, 2021). Job satisfaction is almost guaranteed when the employee's and the establishment's aims, values, and interests are consistent and mutually beneficial.

Zaman et al. (2022) conducted research on resident doctors and found that it is important to apply the P-E fit theory when selecting and recruiting doctors because doctors spend most of their time at the workplace (hospital) and if the environment does not fit in with the personal goals, interests and values of the doctor, the doctor can easily choose to leave as there is an equal demand for doctors in the market. It is therefore important to match their work environments to the employees. Elements to take into consideration include the workplace culture and the types of people working there. The significance of physical working circumstances cannot be overstated, given that even little changes in the working environment, such as increased space or the inclusion of separating walls, improve privacy and satisfaction (Soo-Lee et al., 2015).

Zaman et al. (2022) expanded their research by incorporating the Action learning theory, which describes practice in which employees are encouraged to reflect on their experiences with their colleagues to improve their actions. By doing so, a culture of collaboration of skills is fostered thus strengthening their efforts in the organisation (Vince, Abbey, Bell, and Langenham, 2018). It can also encourage active learning in the organisation. However, this strategy alone may not work and will be to be merged with other techniques to get holistic improvements on a larger scale and could be attributed to the fact that specifically in the health-care sector there is not enough space and time for action learning because doctors generally have an enormous load and work under tight time constraints. Workdays are often unpredictable so these instances of

active learning can never be scheduled in advance (Vince at al., 2018). Resident doctors at private hospitals who had enough development chances were more satisfied with their jobs than resident doctors at public hospitals who had restricted development opportunities due to a large patient load (Zaman et al., 2022). However, it can be argued that knowledge can be improved when working in novel conditions and improving employees' abilities to tackle complicated problems autonomously. As a result, action learning theory has been well-established in the health-care sector, particularly for developing resident doctors as clinical leaders (Zaman et al., 2022), especially when the resident doctors and the workplace are working towards the same goal, which is consistent with the P-E fit theory. PE fit theory points out that an employee may feel content with their job satisfaction if they are happy at work which influences overall life satisfaction. Therefore, PE fit theory must be taken into account during the recruitment and selection process.

Nayak, Sahoo and Mahanty (2018) referred to Person-environment fit theory (PE) as a best-fit model which also demonstrated that QWL is an important link between employee empowerment and employee commitment. Nayak et al. (2018) expanded on this best fit model by employing Kanter's theory of structural power as a yardstick for measuring empowerment among healthcare professionals. Nayak et al., (2018) described Kanter’s theory of structural power as a scenario where employees who are empowered seem to be well equipped to confront adversities at the workplace. Employees can also close any gaps between their actual and expected work conditions and performance. There appears to be agreement that empowerment can improve an employee's QWL, particularly when they have control over their workload, feel supported by their colleagues and superiors, are rewarded for their accomplishments, and are treated fairly. Work productivity or effectiveness of empowered employees improves dramatically, reducing the likelihood of the person quitting the organisation. Wong and Laschinger (2015) discovered that workplace empowerment has a positive association with job satisfaction and can support healthier employees, decrease stress levels, increase attitudes towards respect and fair play, and improve QWL.

A similar judgment appears to have been reached in a study conducted by Scotti and Harmon (2014) who links the organisational climate to work outcomes. It is worth noting that different groups of employees will perceive the satisfaction levels differently based on their duties that they are responsible for as well as the intensity of the customer contact when completing their duties. The results of this study indicated that technical support staff were the most favourable

in their perceptions of work-life balance, job control, and service quality, however they were more likely to leave if a better opportunity came by. Clinical practitioners were the most likely to stay in their jobs as they experienced the lowest amount of stress leading to a higher rating of job alignment compared to other groups of professionals. The nurses showed the least favourable perceptions of role alignment and job control. Nursing professionals also showed higher stress levels.

5.7 Swanson's theory of caring

Mafula, Nursalam, Sukartini (2020) conducted research on QWL of nurses the inpatient care, intensive care, surgical installations, neonates, haemodialysis departments at eight different hospitals. The study intended to integrated Swanson's theory of caring with the QWL to develop a best practice model to improve the performance of nurses.

The Swanson's theory of caring has five elements consisting of maintaining belief, knowing, being with, doing for, and enabling which can be linked to characteristics such as supporting the patients and colleagues, being sensitive, affectionate and empathetic while feeling a sense of responsibility towards the department and patients. Such behaviour may be rewarded with acknowledgment by patients and seniors. In turn, a nurse who experiences a high QWL is more likely to integrate such caring behaviour into the nursing process (Mafula, Nursalam, Sukartini, 2020).

5.8 Needs satisfaction and spill over theory

Needs satisfaction theory builds on the theories of Maslow (1956) and Herzberg's (1959) two factor theory (Soo-Lee et al., 2015). These theories demonstrated that people have elementary needs that they seek to meet through work, such as health and safety (the need for protection from potential injury or harm), the need for recognition and appraisals, a reasonable workload, supervisory and team support, and the need for training and flexible work schedules. If employees believe that their requirements are being met or that their expectations have been exceeded at work, they will have a higher level of job satisfaction. Furthermore, according to spill over theory, QWL influences not only job happiness but also other elements of life such as social and leisure activities, ultimately leading to overall life satisfaction (Soo-Lee et al., 2015). The need satisfaction theory identifies economy and family needs, self-esteem needs, self-actualisation needs, social needs and aesthetic needs. Once all these needs are satisfied,

job satisfaction is almost guaranteed and is known to lead to high QWL. The satisfaction will spill over to the personal life of the employees.

Economy and family needs can be understood as the balance between work and personal life meaning that there is no work- family conflicts. The employee can meet family responsibilities and contribute positively at work (Soo-Lee et al., 2015.) Irregular job patterns, long working hours and heavy workloads to assess the ability to achieve a work life balance are factors that are known to cause work family conflicts which can cause frontline staff to be emotionally exhausted.

The self-esteem need is based on Maslow's (1956) theory where individuals need to be respected to have self-esteem. It signifies the desire of employees to be accepted and valued by their family, colleagues and seniors. The need for recognition presents opportunities for the implementation of reward systems and maintaining a good company image. Employees who work for an establishment with a good public image feels a sense of pride.

Allowing personnel to have discretion and responsibility in providing high-quality service is one technique for meeting self-actualisation goals. Empowered employees work actively to complete client demands by acting ethically and satisfactorily, which results in customer pleasure (Soo-Lee, 2015). Another approach is to match employees' qualifications by taking into account their knowledge, skills, abilities, and experiences in relation to the important job qualities in order to achieve self-actualisation demands. Employees are more likely to remain in their jobs/organisations if their qualifications match the job features (Soo-Lee et al., 2015), which is consistent with the Person-environment fit theory (PE) discussed in section 5.6.

Social need is the desire to build significant and fulfilling relationships with colleagues and seniors. Teammates who work together in synergy to create clear goals and communication provide better service, develop trust among each other and work through challenges together successfully promoting a higher level of job satisfaction and a better level of performance (Soo-Lee, 2015).

Aesthetic needs refer to the desire to do work in a creative and imaginative manner and include a variety of supplementary programmes such as full-time work-from-home, part-time work-from-home, flexitime, compressed work week, and regular work arrangements (Soo- Lee et al.

2015). However, given the nature of the healthcare business, this may be challenging to achieve. Because this implies a desire to learn, additional dimensions such as professional development, cross-training, certificate programmes and tuition-assistance programmes, can be implemented to meet this demand (Soo-Lee et al., 2015).

5.9 The three-factor theory

Three factor theory was introduced by Kano in 1984 (Soo-Lee et al., 2015). The three-factor theory focuses on intrinsic, extrinsic and hybrid needs of the employees which can affect the levels of job satisfaction experienced by employees. It adds an extra dimension to Herzberg's two factor theory which deals with intrinsic and extrinsic factors only.

Extrinsic needs (dissatisfiers) are a collection of fundamental prerequisites that, if not met, can lead to unhappiness. These extrinsic demands are regarded as fundamental and necessary. Dissatisfiers include economic, health, safety, and some social requirements (Soo-Lee et al., 2015). Elements such as a comfortable working environment with adequate space, lighting, ventilation, and equipment (Herzberg et al., 1959) will have an impact on employees' health and safety needs, which may have a substantial impact on job satisfaction if they do not match employee expectations.

Furthermore, Soo-Lee et al., (2015) maintained fairness of pay (i.e., economic needs) at his/her expectation level is a large contributor to motivation and performance of work duties and result in low job satisfaction. In addition, supervision and social relationship (i.e. social needs) at work can be significant dissatisfiers if there is a negative relationship amongst peers and supervisors (Soo-Lee et al., 2015).

Employees' intrinsic needs (satisfiers) are tied to their self-actualisation, self-esteem, knowledge, and aesthetics needs, such as achievement, recognition, advancement, and growth. Feelings of success, such as finishing a task or resolving an issue, as well as positive recognition for the accomplishment (i.e., self-esteem needs), have a substantial impact on total job satisfaction. These are known as "value-added" job outcomes. Employee participation at all levels, employee empowerment, opportunity for growth and professional development, training, and recognition are all factors linked with meeting intrinsic wants.

The third aspect is known as hybrids, which lead to job satisfaction if completed and job unhappiness if not completed. Performance is tied to hybrids. The more hybrid elements that are met, the better the work performance. Work values, alignment with personal goals, and mutually beneficial connections are all examples of hybrid components in the three-factor framework. It is also possible that an employee's extrinsic, intrinsic, and hybrid needs can promote certain negative experiences at work that carry over into their family life, and that pursuing the needs may interfere with achieving a happy and satisfying life outside of work, which is consistent with the spill-over theory discussed in section 5.8 (Vansteenkiste et al., 2007).

5.10 The 5 Q's model

To aim for high quality service delivery, one must understand what service quality means. Various models exist such as the SERVQAUL, SERVFERV and 5 Q model to break down the concept of service quality. The 5 Q model is based on the SERVQUAL model however expands the model by including 5 dimensions of quality instead of just the technical and functional aspects of service quality. Camgoz-Akdag and Zineldin (2010) stated that the 5Qs model encompasses technical, functional, interaction, infrastructure and the atmosphere qualities and services and presents the following framework of five quality dimensions (5Qs):

1. Quality of object – This dimension focuses on the technical aspects of service delivery, meaning what will the customers receive. In the context of the healthcare sector, it measures the treatment received by the patient and identifies the main purpose that the patient is visiting the hospital.
2. Quality of processes –This dimension focuses on the functional component of high-quality service delivery, referring to how the health care practitioner performs the core service. It assesses the efficiency with which health-care activities are carried out.
3. Quality of infrastructure – This dimension measures the elementary resources which are necessary to perform the health care services that the patient is there to receive.
4. Quality of interaction – This dimension measures the quality of information, financial and social exchange. Examples may include the percentage of patients who are informed when to return for a follow up check-up and the amount of time spent and the care taken by healthcare service provider to understand the patient's requirements.

5. Quality of atmosphere – This dimension focuses on the quality of the atmosphere in an environment where the service is delivered. The environment could play an important role in the interaction process between the healthcare service providers and the patients.

5.11 Human Relation Theory

Elton Mayo developed the Human Relations Theory of Motivation, which was fundamental to organisational behaviour, organisational development, and personal policy. Mayo's work has an impact on several sectors of academia, including research technique and the management of employee-employer interactions, including QWL (Muldoon, Bendickson, Bauman, Liguori, 2020 and Lodh and Ghosh, 2022). Apart from money, there are various other factors that influence employee satisfaction. Mayo conducted the Hawthorne experiment which separated employees into two groups. The experiment concluded that regardless of the various physical factors such as the quantity of heating or lighting offered in the working atmosphere or how relaxation breaks were controlled, the social aspects influenced the productivity and motivation levels of the employees more than the physical aspects because the participants felt appreciated and valued because they had been chosen to participate in the experiment, which led to them forming new relationships and increasing their productivity. During the trial, it became evident that positive connections and clear communication between managers and employees are particularly important in enhancing employee motivation.

In most modern organisations there is a dedicated Human Resources department which is a direct outcome of the Hawthorne experiment. The Human Resources Department was established to focus on the needs of employees and oversee the relationship between management and staff. Mayo proposed that managers be involved in their employees' working lives and that the workforce be designed so that employees work in teams rather than in isolation where possible (Muldoon et al., 2020) and that social collaboration be increased in the workplace because the theory encourages positive workplace relationships, particularly between managers and employees. Furthermore, a central focus of this theory is employee well-being, encouraging managers to take an interest in and learn more about their employees as individuals, thereby increasing workforce morale as employees feel valued and appreciated, leading to higher levels of employee morale, retention, motivation, and productivity. Mayo's Human Relations Theory, on the other hand, has been challenged (Lodh and Ghosh, 2022).

The theory's main flaw is that it oversimplifies human behaviour by believing that satisfied workers are necessarily productive workers. There is evidence to support social interactions positively influencing motivation and productivity, but there is also a plethora of other factors that contribute to every individual in the workplace, which Elton Mayo simply ignores. Furthermore, while conflict in the workplace is essentially unavoidable and frequently required for success, opponents contend that the concept is based solely on employees and managers interacting with one another and does not take conflict into account. Also, the theory was only based on one experiment and should be replicated to reflect modern times as there are new updated laws and business practices that define how organisations works (Lodh and Ghosh, 2022).

5.12 The QWL model

After considering the preceding research on models and frameworks used by other authors in their studies, it was determined that the QWL model contains all the aspects required to conduct a viable study on QWL, therefore this study is based on the Quality of Work life (QWL) model. The notion of QWL originated in the 1960's-1970's in the United States and Scandinavia. The concept was taken to an international level in 1972 at an International Labour Relations conference where the importance of QWL was endorsed (Afroz, 2017). At the conference, pertinent issues were raised such as increasing demands of both business and family structures, two-income households, ethics of work, capitalism, and overall change in the society at large. These concepts are still applicable today and hold considerable significance in the way we do business. The theory will be examined and will form the basis of the current study.

5.13 Conceptual framework

The research is based on the notion that providing a high work life quality (QWL) for employees will result in a more dedicated workforce and higher quality of service delivery. As a result, the Quality of Work Life (QWL) Model was employed as the conceptual framework for this study because it contains essential features of the many theories investigated.

QWL can be defined as a practise by which an institution responds to the needs of its employees by implementing an approach that includes staff when making decisions and creates a positive environment for individual and professional growth, resulting in both employers and

employees working together towards a common goal and is consistent with Kanter's theory of structural power (Nayak et al., 2018).

The QWL model strives for high production, clear goals, and high levels of job satisfaction and commitment as a result of concepts such as incentives, training, growth and job security, worker involvement, and creating a safe working environment conducive to workplace efficiency (Elango and Sumathi, 2019; Boukhemkhem and Benhassine, 2015). While the main theme of all the aforementioned theories was to attain job satisfaction and efficient, high quality service delivery by employees, the need satisfaction theory, Herzberg's two factor theory, Kano's three factor theory, P-E fit theory focused on conducive working environments, training, growth and mutual organisational and personal needs satisfaction (Soo-Lee et al., 2015; Nayeri et al., 2011; Zaman et al., 2022).

The QWL model identifies that employee performance and organisational success are interconnected, as are QWL and general human well-being. Furthermore, QWL reveals that the standard of the working conditions is closely related to worker happiness and behaviour from a business standpoint. Employees who feel appreciated contribute favourably to the profitability and stability of the organisation in an ideal world. Understanding employees and their needs provides companies with insight into where improvements may be done to reduce negative effects on employees' QWL.

According to research, extended work hours or time away from family cause professional burnout because of high levels of stress caused by work-life conflicts, which decrease employee productivity and profitability. These concepts can be linked to the Needs satisfaction and spill over theories (Soo-Lee et al., 2015) and the Job demands-control theory of job strain (Kain and Jex, 2010; Karasek, 1979).

Worker involvement at all levels of decision-making, creating and sustaining a committed relationship of trust between the company and the employees, and reinforcing a reward system that is fair and reliant on work performance are all commitments to the QWL model. It is also critical for organisations to be attentive to employee requirements, to create a pleasant environment at work, and to adequately compensate employees for a job well done. As indicated in the 5 Q's model, if an individual's income and benefits are adequate to sustain a socially acceptable standard of living, stress is decreased and employee performance increases,

promoting social integration at work and establishing an atmosphere of equality and mutual understanding. A fair workload not only allows for socialisation with friends and family. As proved by the spill over hypothesis, having a suitable workload not only gives time for social activities with family, but it also aids in enhancing employee job satisfaction and productivity. The QWL approach fosters a shared vision, common goals, and a sense of belonging between the organisation and its employees (Soo-Lee et al., 2015; Nayak et al., 2018; Wong and Laschinger, 2015; Camgoz-Akdag and Zineldin, 2010). On the other hand, Human Relation Theory that was first advocated by Elton Mayo in 1933 elaborated that good working condition is directly linked to better productivity. Current QWL perceptions are largely influenced by his work (Lodh and Ghosh, 2022).

5.14 Defining Quality of Work life (QWL)

Quality of work life (QWL) is a significant matter in contemporary day-to-day practice of medicine and must be given adequate attention by the management to avoid any problems with acceptable and appropriate service delivery (Lodh and Ghosh, 2022). The concept of QWL has evolved since the 1960's (Martel and Dupuis, 2006) and is established on the notion that enhancing the quality of working life of employees can impact on their work performance and overall well-being positively (Afroz, 2017). It includes the task (job), the physical work environment (the workplace), social environment (the people) within the organisation, administrative system (record keeping) and relationship between life on and off the job (worklife balance) (Nanjundeswaraswamy and Swamy, 2013).

Various authors have attempted to define QWL over the years. Amalki, Fitzgerald, and Clark (2012) defined QWL as the extent to which an employee is satisfied with personal and work requirements while participating in workplace activities to fulfil the objectives of an organisation. Elango and Sumathi (2019) refers to QWL as the "favourableness" or "unfavourableness" of a job environment for the employees of the organisation by stating in simple terms that the employees who are enjoying their jobs are believed to have a greater QWL and employees who are unhappy or unfilled are said to have a lower QWL.

These QWL scenarios have been shown to influence employee engagement and productivity in health care organisations and other industries (Amalki, Fitzgerald and Clark, 2012). Boukhemkhem and Benhassine (2015) affirms that low QWL can lead to absenteeism and

turnover while high QWL leads to high job commitment and satisfaction. These views are consistent with Sirgy et al. (2011) where QWL has been demarcated in terms of employee satisfaction with higher-order needs and lower order needs.

Afroz (2017) tracked how the theory of QWL has evolved since its initiation. The study revealed that Beinum (1974) had defined QWL in terms of the relationship between the employee and the tasks (Martel and Dupuis, 2006) that must be carried out in a typical workday while Boisvert (1977) defined QWL as a set of valuable consequences of work life that affect the employees, the organisation and society to which they belong. Carlson (1981) considered QWL to be a goal, a process and a philosophy. The goal referred to the organisation's commitment to work improvement, the process referred to the employee's and management's involvement in the process of attaining the goals and the philosophy referred to recognising the individual's dignity within the organisation.

Boukhemkhem and Benhassine (2015) recognised QWL as quality of human experience as they interact at work while Nanjundeswaraswamy and Swamy (2013) referred to QWL as a "process" by which an organisation responds to the needs of the employee by allowing employees to be part of the decisions when designing their lives at work. Saraji and Dargahi (2006) clarified QWL as a comprehensive "programme" that is designed to improve employee satisfaction by strengthening learning at the workplace and assisting employees to deal with daily issues better. The QWL programmes are believed to benefit both the organisation and the employee by mutually solving work-related problems, fostering cooperation, enhancing work environments, and rearranging tasks carefully (Saraji and Dargahi, 2006). Therefore, management must pay attention to employee's well-being as strong workforce will benefit organization (Boukhemkhem and Benhassine, 2015).

From analysing the numerous definitions from the various studies, it can be concluded that there are various determinants of QWL, each one just as important as the next. The QWL "programme" embodies the core notion that creating a cheerful, positive working environment is vital for the well-being of health care staff, patients, and the organisation itself, whether it operates in the private or public sector. QWL is an integrated institutional "programme" in all departments that aims to increase employee satisfaction, building a strong workforce thereby enhancing workplace efficiencies. When instituted correctly, QWL can help to enhance a sense

of teamwork, belonging and togetherness and dissipated dissatisfaction of the employees (Lodh and Ghosh, 2022).

"Happy staff makes for a happy practice and a more successful business."

Elango and Sumathi (2019:205)

When defining QWL, Phan and Vo (2016) concentrated on working conditions, job security, workplace and economic gains, a favourable relationship between morale and productivity, equal employment opportunity, human needs and expectations, and the relationship between motivation and leadership. Alma identified as negative contributors to QWL unsuitable working hours, a lack of facilities for nurses, an inability to balance work and family life, insufficient leave to spend holidays with their families, poor staffing, management and supervision practices, a lack of professional development opportunities, an unfavourable working environment in terms of level of security, patient care supplies and equipment, and recreation facilities such as the break-area. According to research, these components are perceived differently by different demographic profiles based on gender, age, marital status, dependent children, dependent adults, country, nursing tenure, kind of organisation, positional tenure, and remuneration. In rich detail, the authors of studies have described the determinants of QWL which will be discussed in the section to follow.

5.15 Determinants of QWL

QWL is a diverse concept that is made up of a variety of interrelated factors that need careful consideration to conceptualise and measure (Nanjundeswaraswamy and Swamy, 2013). Authors have used the terms factors, variables, constructs and determinants to describe a set of conditions that must be met to ensure a positive QWL. For the purpose of this literature review, these factors will be referred to as determinants. The determinants must be maintained and synchronised in a way to increase QWL of employees thus ensuring higher productivity quality of services delivered. Other outcomes of a high QWL in the healthcare sector include higher number of patients visiting the establishment which leads to higher profitability. Low QWL can lead to a negative impact of the physical and emotional well-being of the employees which lead to a lower quality of service provided (Lodh and Ghosh, 2022). Therefore, we must consider a range of interrelated determinants to ensure a high QWL. There seems to be

consensus amongst researchers in the field of QWL in the health care sector that the main defining determinants of QWL are:

- Favourable work environment
- Compensation and rewards
- Training and development (professional development)
- Work life balance
- Organisation culture and climate
- Relation and co-operation
- Autonomy of work
- Adequacy of resources

It is critical to notice that these determinants are linked, and no single determinant can guarantee good employee QWL. According to Lodh and Ghosh (2022) a positive work environment is more than just a well-balanced job schedule. It also includes a decent work culture, a healthy and safe workplace, adequate rest hours between shifts for both physical and mental rejuvenation, the provision of employee benefits, and, most significantly, a fair system of compensation and reward. Furthermore, there should be sufficient possibilities for employees to update their expertise, advance their careers, and be considered for future promotions. Undoubtedly, these conditions must be available to all categories of staff from doctors, specialist physicians and nurses to clerical staff because, as health care providers, all employees must work in synergy and work under a completely integrated atmosphere to ensure a good workplace culture. Indeed, junior employees also play an essential role in the proper delivery of services. Moreover, this approach must be applicable for healthcare organisations operating both public and private sectors because there is no differentiation in the work being carried out except the paying capacity of the patients.

5.15.1 Favourable working environments

A work environment that can meet the personal requirements of employees is thought to have a favourable collaborative effect, which leads to an extraordinary QWL (Nanjundeswaraswamy and Swamy, 2013). However, there are a variety of factors that may have contributed to rapidly changing work environments in the past twenty years (Boukhemkhem and Benhassine, 2015). Key factors cited include fast paced technological advancements, increased demands of work performance, changes in work patterns and

globalisation of competition. However, Elango and Sumathi (2019) found that regardless of the type of organisation, human resources play an important role in its success in dealing with the factors that contribute to rapidly changing work environments. Elango and Sumathi (2019) affirms that nowadays the workforce is more educated, skilled and affluent and are less likely to accept conditions that are not ideal. People who experience favourable working environments are likely to experience a high quality of work life. Key basic features of a favourable working environment include fair compensation, healthy working conditions, opportunities for growth and security and social integration (Elango and Sumathi, 2019) however, this list may expand depending on the type of organisation i.e basic features may differ depending on whether the organisation is operating in the private or public sectors.

Furthermore, according to Nanjundeswaraswamy and Swamy (2013), many employers have discovered that offering alternative work arrangements such as flexible work hours and a shorter or no commute may boost employee productivity and morale. Additionally, offering food service and transportation are facilities that play an important part in meeting employees' physical and emotional requirements. Almalki et al., (2012) also stated that the working environment, including the level of security, patient care supplies and equipment, and recreation facilities (break-area), are all critical concerns.

Drawing on the work of Elango and Sumathi (2019), it is worth noting that every employee wants fair compensation which means that the rate of pay is in line with local labour laws. Salary structure of employees should be just, fair and equitable however the view that high salaries is equal to happy employees is fast diminishing as healthy working conditions has surfaced as a key defining factor in employee satisfaction. Safe workstations and employee motivation with a view to raising productivity started taking precedents in the 1970's (Martel and Dupuis, 2006). Working conditions must follow local labour laws, the work environment should be safe and conducive to a successful workday. However, factors such as flexi-hours of work, minimum physical risk, provision of safety against noise, pollution, fumes, gases are also topping the list of factors affecting QWL. Employees also value opportunity for growth and job security. There must be room for progression in any job role filled. If there is no room for progression, it must be communicated at the outset. Every employee needs to feel a sense of achievement when promoted to a new role. Social integration in the work organisation means placing a sense of value that one's work brings to the society in which they operate. Employees who develop self-respect because of social integration also develops a sense of belonging to

the organisation. Providing an environment that is free from all types of discrimination improves QWL (Elango and Sumathi, 2019).

Boukhemkhem and Benhassine (2015) added that when an employee experiences a high QWL, they take the same positive feelings into their structures and into society in which they belong raising the notion there is indeed a spillover effect of QWL into one's place in the family and society at large. According to Afroz (2017), all cultures have their unique culture that influences the foundation of how they live. A diverse culture has increased the need for scholars to modify and evaluate QWL in novel ways. There appears to be a few more variables worth mentioning when defining favourable working conditions, which include job and total life span constitution, and social relevance of work life. Afroz (2017) affirms that all societies have their own culture which shapes the basis of how the live. A diverse culture has stimulated the need for researchers to alter and evaluate QWL differently. There appears to be a few more factors worth discussing when defining favourable working conditions which include constitution in the work organisation, work and total life span and social relevance of work life.

The constitution of the organisation refers to the "rule of law" that must be always exercised where employees' rights are not infringed on. Such laws include the right to privacy, the right to expression and the right to equitable treatment (Elango and Sumathi, 2019). Likewise, Boukhemkhem and Benhassine (2015) reported a positive relationship between QWL and institutionalisation of ethics in organisations with job related outcomes such as performance, job satisfaction and organisational commitment. The importance an organisation puts on their social responsibilities, impacts on the QWL of the employees. For example, if the organisation does not show much care and provide low quality products, has no control on pollution, does not dispose of waste responsibly then the employees typically experience a low QWL.

Work and total life span refers to the number of hours employees spend at work or for work compared to the rest of their lives. In the healthcare sector in particular, employees who are required to work for late hours or are frequently transferred to new places of work or have to travel a lot as a part of their duty, typically experience a low QWL as they are unable to fulfil their role in their family for a long period of time (Boukhemkhem and Benhassine, 2015).

5.15.2 Compensation and Rewards

Lodh and Ghosh (2022) defined rewards as salary, advancement, recognition, and growth that match employees' expectations and personal requirements. Development is linked to training and will be covered in the following section. Dhingra (2021) linked remuneration and reward criteria such as work hours, flexibility in working hours, overtime pay, and gender to employee happiness and work life balance (WLB).

A good pay out package referred to as "fair pay" is an integral component of a successful QWL programme and ultimately employee satisfaction (Almalki et al. 2012) and if it does not meet the personal needs and expectation of the employees, it may be a major source of stress (Kakshapati et al., 2021) which could lead to lack of commitment, poor performance and absenteeism and high turnover (Almalki et al., 2012; Lodh and Gosh, 2022; Nanjundeswaraswamy and Swamy, 2013). Liaqat *et al.* (2018) added that pay protection, work hours, paid overtime are other factors that influence this dimension of QWL. Lodh and Ghosh (2022) further revealed that compensation and rewards can serve as motivational factors and build competition among the personnel to work hard and to accomplish organisational and personal ambitions.

Nanjundeswaraswamy and Swamy, (2013) suggests that employee satisfaction, amongst the other factors discussed in this literature review, depends partially on the compensation offered therefore the economic position of people motivate them to work at a job. Compensation and rewards should be based on the type of work completed, responsibilities assumed, personal skills, performance and accomplishments. QWL comes in where the employees are satisfied with equitable wages offered for the work done, hours and working conditions, equal employment opportunities and opportunities for advancement. Remuneration affects work satisfaction, work performance and job security. Fair pay will enable employees to meet other commitments socially and personally.

Dhingra (2021) conducted research on QWL and working hours and observed that while some studies found that additional working hours and overtime are unrelated to employee happiness, others found that overtime and longer work hours have a favourable impact on employees' job satisfaction. Diminished working hours, on the other hand, have a negative impact on life satisfaction due to diminished earning potential. Overtime is guided by government policies and organisations handle overtime differently at various hierarchical level in terms of

remuneration and number of overtime hours allowed. Sometimes, depending on the organisation and hierarchical level of employees, overtime might be common but not compensated. Based on the research, it would be warranted to assume that where overtime is not duly compensated, a negative impact on employee satisfaction can be expected.

Leave is also part of this category. According to Lodh and Gosh (2022), maternity leave and its impact on female employees' professional and personal lives has established a negative economic impact, resulting in high job discontent. While maternity leave might open a gender-based discussion which is disparate for this literature review, it is worth noting that paid leave in general for both male and females must be available for physical and mental rejuvenation.

QWL can also be raised when healthcare staff' remuneration and benefits are increased in accordance with current market prices, increased on a regular basis, have reasonable overtime rates, and include awards for good performance. Training and development may provide opportunities for employees to increase their professional capability and provide opportunities for promotion and thus an increase in salary (Nayak et al., 2018).

5.15.3 Training and development

Health literacy is a worthy factor to consider when ensuring high quality health care (Khoshnudi et al., 2019). Not only does training and development improve organisational commitment and organisational performance, but it also boosts employee morale, employee performance and job satisfaction (Vasudevan and Mahadi, 2017; Lodh and Ghosh, 2022). Providing sufficient training and development also improves emotional intelligence and employee commitment to task completion, risk handling and applying new innovations in their job (Vasudevan and Mahadi, 2017). Management must deploy flexible attitude by allowing collaborative meetings at different authority levels. Suitable policies for career advancement and development must be implemented to ensure that training is assumed on a frequent basis to foster employee loyalty (Lodh and Ghosh, 2022).

Employee training and development assists to improve technical competencies, builds effective communication, helps coach staff through change, enhances problem solving skills and conflict management. Training and development are also useful for effective team building and team leadership. Research highlights that inadequate training was found to be a major challenge in

executing daily duties therefore policy makers must design appropriate training programmes for employees and invest in their training and development as it is enormously beneficial (Kumah, Ankomah and Antwi, 2016).

Providing adequate training and development is one of the successful ways of employee empowerment. Employees who receive effective training get opportunities for promotion and are better prepared to assume leadership responsibilities (Kumah, Ankomah and Antwi, 2016; Lodh and Ghosh, 2022). The opportunities for profession growth and career advancement are increased which in turn increases the prospects for earning power of employees increasing QWL (Afroz, 2017).

When there are insufficient possibilities for career promotion, more education, and access to continuing education, a lack of professional development frequently undermines efforts to deliver quality care and is a primary cause of job unhappiness. Furthermore, employees who participated in an educational programme were less likely to abandon their jobs than those who did not participate in any programme. Health care providers strive to update their knowledge and abilities on a regular basis in order to deliver high-quality patient care and meet their QWL. Their competence and performance will suffer as a result of a lack of training programmes (Almalki et al., 2012).

5.15.4 Work life balance

Studies have found that employees who can maintain a positive work life balance (WLB) are motivated and are able to optimise their work performance. When employees fail to preserve their whole life space, their work efficiency suffers. WLB is associated with favourable social and familial support (Hj et al., 2017). Furthermore, Liaqat et al. (2018) identified demographic ranges that influence WLB as age, gender, academic qualification, married status, job content, economic and family difficulties, job happiness, pay protection, and overall life space.

Although health care providers in the older age groups had greater QWL, productivity levels in the health sector remained low due to prolonged service duration (Fanya et al., 2020). Furthermore, older employees manage to maintain a better work-life balance than younger employees since they have less family commitments (Dhingra, 2021). In addition, due to the irregular hours of health care workers of all ages Duracinsky, Marcellin, Cousin, Di Beo, Mahe,

Rousset-Torrente et al. (2022) reported that night work is a source of stress with family and friends, as well as employees feeling more irritable because working at night also impaired QWL.

Longer working hours are correlated with lower work-life balance (Dhingra, 2021) and is more significant in the case of females as compared to males (Almalki et al., 2012). However, part-time jobs are related with lesser work-to-family restriction and high WLB and might be especially applicable to females (Dhingra, 2021).

Family-work tension is more prevalent among females who have children compared to females who do not have a children as they need to share their time between work and home. In some cases, there is gross dissatisfaction amongst female healthcare providers who find it difficult to maintain WLB due to scarcity of staff, long working hours and discriminative attitude from the leadership (Ajayi, 2018). The rate of remuneration for hours worked determines the perceptions of QWL and WLB (Almalki et al., 2021) and is linked to self-esteem, respect and psychological status regarding financial remuneration and relationships with seniors. So, apart from earning the same as their male counterparts, female health care providers experience WLB very differently (Zaman et al., 2022; Lodh and Ghosh, 2022).

According to Lodh and Ghosh (2022), females may be highly misrepresented at the top management level due to the obstacles that a female healthcare provider must face and overcome during her journey to the top of the ladder, in comparison to her male counterpart, despite her ability and commitment to her work, primarily because females find it difficult to maintain a pleasant work-life balance (Almalki et al., 2012).

Paid leave is also included in this category. Lodh and Gosh (2022) reported on maternity leave and its impact on female employees' professional and personal lives, as well as establishing a negative economic impact resulting in high job discontent. Dinghra (2021) affirmed that gender biasness may be a source of workplace stress due to gender specific roles and inability to maintain WLB by female respondents. Almalki et al. (2021) agreed that inadequacy of holiday breaks for nurses and their families may cause problems in maintaining WLB.

Almalki et al. (2012) further elaborated on factors that affect QWL regarding WLB that must be considered including the amount of energy that the employee has left after work to carry out

family commitments, whether the leave policy is suitable for the needs of the family, the employee's ability to balance family needs with work, the importance of having support for taking care of elderly parents and importance of on-site childcare or access childcare services nearby.

Balancing work and family life harmoniously has become increasingly crucial as the number of women working increases, as has the number of single parents in the workforce and the number of couples in which both members work increases. While traits like age and gender cannot be changed, ensuring long-term employment is crucial, given the correlation between demographic parameters (LaTorre et al., 2021). In doing so, absenteeism, frustration and low productivity resulting from a poor work life balance (Jackson, 2021) can be avoided.

5.15.5 Organisation culture and climate

Nanjundeswaraswamy and Swamy (2013) identified organisation culture and climate as key determinants of QWL. Organisation culture can be referred to as a set of properties and organisation climate can be referred to as a collective behaviour of people involved in the organisation. It deals with the values, vision, customs, policies and procedures and leadership style of the organisation.

Organisation culture and climate may be affected by policies that deals with conducive and reassuring work environment, work flexibility and adequate work life balance. Careers with job enrichment policies and job recognition, career advancement policies (Almalki et al., 2021) are significant components to maintain acceptable level of QWL for employees (Lodh and Ghosh, 2022). Policies involving promotion opportunities and the criteria used to make promotion and reward decisions must be considered as beneficial to the employee (Nanjundeswaraswamy and Swamy, 2013).

Leadership must be flexible when implementing policies and procedures (Lodh and Ghosh, 2022) as this will assist to improve the home and work environments, improve personal and organisation performance and increase employee commitment levels (Almalki et al., 2021). Employees should be included in policy and decision making. As much as employees need support from their leaders/managers, leaders need support from the organisation (Turato and Oprescu, 2020). Nanjundeswaraswamy and Swamy (2013) maintains that ensuring employee

involvement in decision making at all levels improves QWL and makes full use of the employee's potential, promotes greater participation and involvement of employees and managers.

The degree to which employees have the ability to make decisions that affect their work circumstances can have an impact on their QWL (Almalki et al., 2021). The more the ability of employees to make such decisions, the higher the quality of work life (Lodh and Ghosh, 2022), and it is beneficial in achieving high organisational citizenship behaviour, QWL, and job satisfaction (Pio and Tampi, 2018). Decision making that affect quality of service delivered in a hospital setting are typically undertaken at lower levels of the management hierarchy therefore clinical leadership is vital to improve organisational performance especially with respect to the quality of care (Doherty, 2014).

Clinical leadership is a type of transformative leadership provided by clinical professionals to improve treatment quality through innovation, either through official participation in clinical activities or by informal role modelling and mentorship (Doherty, 2014). According to Turato and Oprescu (2020), adopting effective leadership styles based on the scenario is critical because different types of leaders are necessary for different situations. Turato and Oprecu (2020) agree with Doherty (2014) that managers should use transformational styles, but add that managers should also use transactional styles, where managers reward or discipline staff to achieve the desired outcomes, which is critical to the long-term viability of today's public healthcare organisations, which face significant frequent change. When change is implemented, QWL may be affected, therefore proper leadership is imperative.

Transformational leadership is concerned with encouraging employee performance by exhibiting behaviour that followers wish to emulate. They instill confidence and faith in those around them. They encourage followers to bring new ideas forward and stimulate a new innovative way of thinking. In turn, transformational leaders provide support and reassurance to their followers as they serve a coach, mentor, teacher and facilitator to their followers (Turato and Oprescu, 2020) and is demonstrated by Park (2017) who researched organisations that have used leaders to model the attitude that they wanted to see in the junior level employees. These organisations have benefitted immensely from utilising empowering managerial practices. Employee behaviour and attitude were positive leading to high productivity levels of both the employees and the organisation.

5.15.6 Relation and co-operation

Employees in the public sector are more vulnerable to work-related stress due to a lack of manpower, a smaller workforce and insufficient logistical support (Lodh & Gosh, 2022). Other stresses identified by Kakshapati et al. (2021) included role ambiguity, wage and job insecurity, and protracted duty shifts. These might operate as roadblocks, resulting in a lack of commitment, weariness and other psychological symptoms, poor performance, and absenteeism, which can be alleviated with effective cooperation and relationships among many players in the healthcare industry (Lodh & Gosh, 2022).

According to Kakshapati et al. (2021), well-defined job roles, the urgency of job restructuring, proper acknowledgment at work, the supply of a suitable work environment, and the availability of career progression chances can reduce the negative effects of workplace stress. Other authors suggested that to get the best co-operation from employees, a proper performance appraisal system can be implemented (Lodh & Ghosh, 2022; Subrahmanya, 2018; Battal et al., 2017). More relevant training and clearer lines of responsibility is essential (Folkman, Tveit and Sverdrup, 2019). If employees are clear about what they are expected to achieve and their achievements are measured in an unbiased approach, they can be held accountable for non-performance.

Accountability is viewed as the key to improving healthcare services in healthcare systems. Furthermore, the term accountability can refer to an organisational structure of accountability and responsibility, as well as an employee's fundamental professional virtue that is inwardly focused. As a result, performance management systems and quality improvement efforts are being implemented in order to improve the quality and efficiency of frontline health care through individual and collective accountability. Accountability is an essential component of health system governance systems that deals with the management of interactions between diverse stakeholders in the healthcare industry (Mukinda, Belle and Schneider, 2020).

In response to the scarcity of health care employees, a growing need for healthcare services and new requirements and expectations in relation to service delivered, Folkman, Tveit and Sverdrup (2019) called for innovative ways of collaboration between professionals. It is important to understand how frontline managers in the health care sector enable the development of new roles and methods of working during times of change. Interprofessional collaborative efforts may be the key to assist these employees with the challenges they face in

daily practice. For example, in Norway, social educators are educated to handle medication while assisting health care professionals with environmental work and rehabilitation with patients who have cognitive impairments such as physical, mental, or social disabilities (Folkman, et al., 2019).

A culture of collaboration and partnership should also exist among primary health care clinics, hospitals, and communities. Such participation is seen as promoting the essence of community duty and accountability, fostering a culture of learning rather than blame, and prioritising the needs of the patient. Accountability connections are bidirectional, stretching up and down hierarchies, outward to patients and communities, and inside to the 'self.' Accountability has the potential to encourage collaboration, healthy relationships between primary care, hospital services, and communities, investment in knowledge and skill development, and responsive support systems (Mukinda, Belle and Schneider, 2020).

5.15.7 Autonomy of work

An autonomous workforce can be described as a situation where employees have the freedom to make decisions that impact on their work. They can plan, coordinate and control work related activities by themselves, giving them a sense of independency (Nanjundeswaraswamy and Swamy, 2013) however they must still be accountable for completion of tasks (Mukinda et al., 2020) and is seen as a significant determinant of QWL as the very definition of QWL refers to creating mechanisms which permit employees to share completely in making the decisions that design their lives at work (Boukhemkhem and Benhassine, 2015; Nanjundeswaraswamy and Swamy, 2013; Saraji and Dargahi, 2006; Lodh and Ghosh, 2022). Nanjundeswaraswamy and Swamy (2013) further elaborated that QWL as a set of procedures which include elements such as self-directed work groups, job enrichment and high participation aimed at increasing the happiness and output of workers, promoting communication and engagement.

Engagement and good communication can help organisations match work activities with the needs of their employees. Lodh and Ghosh (2019), noted that there is positive outcome in job performance and overall satisfaction when there is a high level of employee engagement and good communication. It leads to better planning and ultimately leads to a high QWL (Nanjundeswaraswamy and Swamy, 2013).

5.15.8 Adequacy of resources

To achieve high quality service delivery, resources such as adequate time for task completion, appropriate equipment and staff, adequate knowledge, and aid in completing tasks are critical Lodh & Ghosh (2019). Healthcare managers and staff are continually challenged with significant difficulties such as rising health expenses, a shortage of trained healthcare personnel, and limited access to healthcare for underprivileged groups. There is a persistent emphasis on cost-cutting programmes that compel personnel to do more with less, compromising their ability to provide high-quality healthcare to patients (Turato and Oprescu, 2020).

According to Lodh and Ghosh (2019), resources must match the objectives or personnel will be unable to achieve the goals, effectively setting them up for failure. The end effect will almost certainly be a lack of motivation, a sense of helplessness, employee unhappiness, and decreased QWL. Access to the correct resources at the right time and in the right quantity will improve patient care, reduce hospital stays, and raise patient and health care worker satisfaction.

5.16 Relationship between QWL, commitment and job satisfaction

There is an apparent relationship between QWL, employee commitment and satisfaction. Employee happiness has an impact on an employee's commitment to their work. Committed personnel are more likely to stay with the organisation for a longer period of time, which encourages their career advancement and, as a result, job satisfaction. The organisation receives a more intuitive and experienced workforce, which benefits both employees and employers. According to QWL, the character of the work environment is directly related to employee happiness. Employees who feel valued contribute positively to the firm's profitability and stability in an ideal environment. Understanding employees and their needs allows businesses to see where changes can be done to reduce negative effects on employee QWL, which affect tardiness, commitment, employee turnover rates, output and health care expenses. (Boukhemkhem and Benhassine, 2015; Soo-lee et al., 2014; Nayak et al., 2018; Almalki et al., 2012; Padmaningrum et al., 2020; Srivastava et al., 2019; Lodh and Ghosh, 2022).

The concept of job satisfaction is not only about giving a person a job and paying them a salary. It is about offering a workplace where people feel accepted, wanted and appreciated.

A satisfied employee is happy, committed and productive. High satisfaction, commitment and QWL levels can translate to high performance work practices, such as improved patient care, shorter hospital stays, and satisfaction for both patients and health care givers. However, failure to manage QWL factors will impact negatively how employees behave and will affect their job satisfaction, job performance and turnover intention (Almalki et al., 2012; Padmaningrum et al., 2020; Lodh and Ghosh, 2022).

5.17 Conclusion

An in-depth review of a host theories on QWL were presented. It was found that each theory has its own pros and cons. While some pros supported the objective of this study, there were critical aspects that affect QWL that was missing. Moreover, the theory chosen for the respective studies discussed, were also applicable to and unique to each study considering aspects such as population and industry represented in the studies. As is evident in the discussion, the theory that is most suited for this study is the QWL theory as it speaks to the variables which include job satisfaction, job commitment, quality in service delivery relevant to the healthcare sector and frontline employees.

Informed by the literature, the researcher concludes that QWL impacts on job satisfaction and employee commitment. The higher the job satisfaction, the higher the job commitment. Employees who experience high commitment to their job, are more like to produce a highly quality of service particularly in human intensive industries such as the healthcare sector. It can also be concluded that the are certain determinants that must be met to achieve a high QWL in the workforce. Each determinant is reliant on the next and all are interrelated. The next chapter presents the methodology used to conduct the current research.

CHAPTER SIX

RESEARCH METHODOLOGY

6.1 Introduction

The preceding chapter offered a comprehensive assessment of the relevant literature on the theories that underpin this research. The theories mentioned highlighted crucial parts of QWL that influenced the study's design and approach. The empirical analysis of the paper focuses on the issues faced by healthcare professionals in South Africa's public health sector, with a particular emphasis on the influence of QWL on service delivery. The primary goal of this chapter is to describe the study's research methodologies and strategies. The study's primary goal is to explore frontline healthcare personnel's quality of work life (QWL) and ability to provide high-quality services. Furthermore, four specific study objectives were established:

1. **Objective 1**: Investigate the expectations of frontline healthcare workers after they embarked on the healthcare quality training,
2. **Objective 2**: Determine what knowledge and skills were acquired from the healthcare quality training,
3. **Objective 3**: Discover the current QWL experiences of frontline healthcare workers,
4. **Objective 4**: Propose a model to promote high quality of work life to ensure that a high quality of service is provided.

According to Wagner et al. (2012), methodology relates to the study of the procedures employed in conducting research. The author asserts that utilising methodology in a study such as this has several advantages, including:

- It establishes the specific guidelines for investigating the research topic;
- It allows the researcher to describe in detail how the study's findings were obtained and enables others to assess it;
- It enables the researcher to report on the rules and procedures followed; and
- It enables others to attempt to replicate or critique the research approach used to reach the findings.

The mixed methods research strategy was chosen as the best methodology for the study since it contains components of both qualitative and quantitative research methodologies. To

evaluate the aims of this research and draw conclusions on the relationship between QWL and service delivery in the South African public healthcare system, it is critical to employ both qualitative and quantitative data. It would be difficult to grasp the relationship between these elements without this mix of data (Bryman, 2012). The sections that follow will detail the research technique used for this study.

6.2 Research design

Research methodology is a process for systematically solving problems through research. It can be defined as the study of how scientific research is conducted (Kothari, 2004). Choosing the best research design is not only vital, but also critical to the study's success. In previous studies, Welman, Kruger, and Mitchell (2005) and Creswell (2014) agreed that the study design is a collection of purposeful processes to gather and interpret data to deepen our understanding of a theme or issue. The research design acted as a blueprint, detailing the procedures needed to gather the information needed to answer the problem (Malhotra, 2015).

For the quantitative component of the study, a positivist paradigm was used to ensure that the data received and interpreted was limited to only the responses retrieved, measured and objectively interpreted from an outside perspective, allowing the researcher to focus on the facts rather than the respondents' opinions and feelings. A positivist method is based on observed human conduct, and numerous tests can be performed to help the researcher avoid biassed results (Kaur, 2016). As a result, the emphasis is on consistency and ease of replication (Welman et al., 2005; De Vaus, 2005).

According to the positivist method, proposed hypotheses are established as descriptions of phenomena and are then put to the test via experiments (Mittwede, 2012). The positivist paradigm aims to explain laws of cause-and-effect, patterns, and generalisations using a natural scientific method that depends on quantitative assertions that may be stated in a statistical formula. It is based on the verification of hypotheses. According to the principles of natural scientists, the positivist paradigm thus presupposes that the observer and the object of observation are separate, impersonal, and non-interactive (Major, 2017).

Furthermore, for the qualitative parts of the study, a descriptive exploratory technique was used, which is a type of research design that seeks information in a systematic manner. It is

typically used to describe a phenomena, circumstance, or population. More particular, it aids in answering the research problem's what, when, where, and how questions, rather than the why (Kaur, 2016). According to Babbie and Mouton (2012), exploratory research are required when certain facts are known but additional information is required for building a suitable conceptual framework that is relevant to the current study.

6.3 Mixed Method Research Paradigms

There are two types of research methods: quantitative and qualitative (Kaur, 2016). Language is used to portray qualitative facts rather than numbers. The qualitative research method is an investigative study methodology used to investigate complex phenomena that are difficult to interpret using quantitative research. A qualitative research method is also employed to gain a thorough comprehension of the core research reasons and motives. It assists researchers in understanding research participants rather than fitting their responses into established categories with little room to qualify their selections (Creswell, 2014).

Quantitative research is used to augment preliminary findings and confirm qualitative findings. The analysis of numerical data is a component of quantitative research. Quantitative research, according to Kaur (2016), has also benefited the public health care industry. Quantitative research entails larger-scale surveys or research that allows for the development of a factual base with sufficient robustness to allow for statistically rigorous analysis (Kaur, 2016). Surveys, observation, and experimentation are three methods for collecting quantitative primary data. According to Malhorta (2015), quantitative research employs a series of formal questions with predetermined response alternatives in surveys, which are often distributed to a large number of respondents. Researchers must convert quantitative data gathered from organised and validated data-collection tools into meaningful narrative information, ultimately creating a convincing data-supported story.

A mixed method approach was adopted for the study comprising of both qualitative and quantitative methods which generated comprehensive and holistic information and has guided the data analysis enabling proper conclusions and good recommendations from this study. An in-depth questionnaire consisting of 31 questions was design to meet the objectives of the study.

6.3.1 Triangulation

Triangulation is a research technique where a researcher gathers data through multiple methods and combines the collected data to strengthen the credibility of their findings. By applying triangulation in a mixed-method study, the results obtained from one research approach are verified against those from another approach, thereby increasing confidence in the study findings (Wagner et al., 2012; Bryman, 2012). In the current study, quantitative data is collected through closed-ended and Likert scale questions in the questionnaire, while qualitative data is gathered from open-ended questions in the questionnaire and structured interviews.

Valencia and Mercedes (2022) describe triangulation as the systematic comparison of results on the same research topic produced by various research methods. In the case of the current research, qualitative and quantitative techniques were employed. Triangulation can be applied to data sources but is most frequently employed in data collecting and analysis methods. By using evidence obtained from a variety of data sources, researchers may strengthen the validity of their research conclusions. Triangulation is a term that is frequently used to describe the employment of two or more procedures in a study to verify the findings. Triangulation is a powerful approach for validating data through cross-verification from two or more sources. Both quantitative (validation) and qualitative (inquiry) research can make use of it. It is an appropriate methodological tool for establishing the legitimacy of qualitative analysis (Leedy, 2014). Triangulation, according to Lee and Lings (2008), is one strategy for attempting to increase validity. Welman, Kruger, and Mitchell (2005) state that triangulation is utilised to confirm data using at least three independent methods. Triangulation enables cross-checking from more than two sources, which makes data validation simpler. By conducting a literature review and an empirical investigation, the study achieved its objectives effectively using triangulation which will be discussed further in section 7.10.

6.4 Population and sampling

Sampling is the method employed in empirical research to choose the elements that will take part in the study, according to Wagner et al. (2012). According to the author, while choosing a sample for a survey research study, the researcher needs to decide which target group is most appropriate for the issue under inquiry, what kind of research instrument to utilise, and how to deliver the instrument. Hesse-Biber (2010) argues that in a mixed methods study like this one,

ethical guidelines should be followed, the sample size should be sufficient to address the research question, and the sampling design itself should be considered. The sampling design itself comes from the research question. In contrast, the population comprises all the persons or units under study (Wagner et al., 2012). Byman and Bell (2011) state that selecting the research population helps the investigator decide the kind of questionnaire to employ and how best to give the questionnaire. The sample size and target population in the current study are sufficient to address the research issue.

6.4.1 The target population

The target population was chosen in accordance with the stringent inclusion criteria outlined throughout the study's proposal stages. Each respondent was a front-line staff member who worked in a public hospital and was directly involved in the delivery of services, such as admissions, administration, clinical, nursing, medical care, radiography, and pharmacy. Due to difficulties in obtaining authorisation to distribute surveys, this study only covered two central hospitals in two regions in South Africa. At central hospitals, 5216 people registered for the NHQIP scheme in total (Pillay, 2021). Sharma, Mudgal, Thakur, and Gaur (2020) provided a method to determine the sample size, suggesting the appropriate sample size for a given population size, preferred confidence interval, and particular margin of error that helped the researcher determine the appropriate sample size. Using the formula $n = \frac{X^{2*}N*P(1-P)}{ME^{2}*(N-1))+ x^{2}*P*(1-P))}$ it was established that 360 units of analysis must be targeted to obtain a 95% confidence level and a 5% margin of error, using 5216 as the overall population size. One hundred and eighty responses from the two institutions were targeted for this study. In total, 322 questionnaires were completed and recorded, and an 89% response rate was achieved.

6.5 Sampling methods

Probability (random) and non-probability (non-random) sampling were considered. In contrast to non-probability sampling, which eliminates equal probability of being included in the chosen sample by giving some study population units no chance of being selected, probability sampling is a technique where every unit of the study population has an equal chance of being selected (Olsen, Orr, Bell and Stuart, 2013).

Probability sampling is useful for reducing biases since a selection of random elements closely resembles the characteristics of the studied population as a whole. Simple random sampling,

systematic random sampling, stratified random sampling, and cluster sampling are the different types of probability (random) sampling that are identified in the literature (Abbott and McKinney, 2013).

When a researcher wants to gather information about social reality, non-probability sampling is important, making random selection irrelevant. Because the research is focused on identifying the components of the sample with the presumption that it is representative of the population, subjective procedures are used to decide which units are included in the sample. Non-probability sampling, as a result, does not give every unit in the research population an equal chance to be chosen. Convenience sampling, purposive sampling, snowball sampling, and quota sampling are some of the common non-probability sampling methods (Blaxter et al, 2010; Etikan, Musa, Alkassim, 2016).

The table below was created to analyse the different sampling methods available so that the most appropriate choice can be made for the current study.

Table 6.1: Types of sampling methods

Probability sampling methods	Description
Simple random sampling	Each object of the population has an equal chance of being included in the sample chosen for the research. The technique allows the use of statistical methods to evaluate the sample results.
Systematic random sampling	Based on simple random sampling techniques where the sample is selected from a random starting point and a fixed system of intermittent intervals (called the sampling interval). The sample is therefore selected from the random first sample and includes each unit selected at the subsequent sampling interval. For example, every 2nd unit of analysis will be included in the sample.

Stratified random sampling	Groups, known as strata or subgroups, are created from the population. The population is then divided into strata, one for each unit. Each stratum is randomly sampled for the purpose of the study. The method offers protection against the likelihood of some units in the sample staying underrepresented.
Cluster sampling	Clusters are the already existing divisions of the population. The next step is for the researcher to choose a cluster from the study population. The sampling is limited to the chosen clusters.
Non-Probability sampling	Description
Convenience sampling	The sample is chosen based on the units' accessibility, availability, and closeness. The researcher's convenience as a data source dictates how involved the participants will be in the study. On the other hand, because it is so strongly oriented on convenience, it could not be reflective of the population.
Purposive sampling	The researcher chooses the sample based on the unique traits of the study population that will answer the research's goals. It is believed that the research units selected as the sample accurately reflect the general population.
Snowball sampling	Using this method, participants can choose who else they want to take part in the study. The researcher chooses the initial participant(s) in the first stage. The first participant(s) then invite additional people to take part. Access to some people who might not be simple for the researcher to reach is

	made possible by this strategy. The sample's gathered participants could make it challenging to draw conclusions, which is a downside.
Quota sampling	The stratified random sampling approach is used to divide the population into smaller subgroups. Quota sampling, on the other hand, chooses the participants from each subgroup based on the researcher's judgment rather than on randomly, as in the stratified random technique. Although it is a low-cost sampling method, the researcher must watch out for bias.

Source*:* Adapted from Abbott and McKinney (2013); Blaxter, Hughes and Tight (2010); O'Gorman and MacIntosh (2015); and Etikan et al., (2016).

To understand and explain a social phenomenon, the current study seeks to collect rich data; as a result, it needs to select an effective sampling technique. The non-probability sampling technique was deemed appropriate for this research by virtue of the subjective techniques used in selecting the participants for the study. Furthermore, the aim of the current research is a study of social reality, which is to assess the quality of work life experienced by frontline employees that affects their ability to deliver high quality service. Purposive sampling, according to Etikan et al. (2016) and Parahoo (2014) is frequently employed when rich data is needed from individuals or groups that are competent and aware of the issue of interest (QWL experienced). As a result, the current study uses a purposive sampling strategy. The researcher chose the following standards to help in the selection of suitable candidates:

- Must work at an institution that is a public sector hospital
- Must work as a frontline staff member directly involved in service delivery including administration, admissions, nurses, doctors, pharmacists and ward attendants.

6.6 Data collection instrument

All frontline personnel at selected state hospitals in South Africa were given a structured questionnaire with a series of open-ended and closed-ended questions (Appendix 1). Using different types of questions allowed the researcher to accomplish the aim of the study easily. While closed-ended questions limited responses to a range of words on a list, open ended questions did not provide a list to choose from but rather allowed the respondents to provide comprehensive responses. Open ended questions suit exploratory and descriptive research where the responses cannot be predicted or expected. The closed-ended questions consisted mainly of tick boxes and rating/Likert scale questions. Using open-ended and closed-ended questions eliminated the risk of limited responses as asking only closed-ended questions restricted the respondent to a particular response (Welman, Kruger and Mitchell, 2005).

The questionnaire was designed to explore the challenges experienced by frontline healthcare workers and how it affects their ability to provide high quality of service delivery giving insight on how they view QWL, experience challenges and perform their daily duties. It also gave insight on how these employees wish to perform amidst challenges. The detailed questionnaire, which included 31 questions, was created to suit the study's objectives. To guarantee that the goal is met, each question was related to the objectives and research questions. There were three sections to the questionnaire. Section A had 12 questions designed to profile the respondents. Later, the information was used to assess how the different groups of respondents' experience challenges and perceive QWL based on their age, gender, years of service, level of seniority and department that they work at. The section consisted of 2 qualitative questions and 10 quantitative questions. Next, section B included questions based on training and skills. There were 10 questions which were made up of 3 qualitative questions and 7 quantitative questions. The responses were used to ascertain past, present and future aspects relating to training and skills. The questions in this section linked to objective 1 and 2 of the study. Lastly, Section C consisted of 9 questions, 2 of which were qualitative in nature and 6 were quantitative and was used to get information based on the QWL aspect of the study.

The questionnaire was developed with the research objectives, research questions, and findings from the literature review in mind. A draft questionnaire was examined with the supervisor, who provided feedback and suggestions to improve the instrument. Following that, it was sent to a statistician to see if the data generated from the questionnaire would be suitable for SPSS

analyses. The final questionnaire was authorised and ready for distribution once it had been edited and checked.

6.7 Data collection methods

Emanating from the NQHIP Plan, 5 central hospitals were identified as quality learning centres. Upon enquiries, it was noted that one central hospital was mentioned twice. Therefore, four central hospitals listed on the NQHIP were targeted. An online application to the respective provincial health research committees were sent on 11 October 2022. Permission was granted as follows:

- KZN Health Research Committee – 18 October 2022 (Appendix 4)
- Gauteng Health Research Committee– 20 October 2022 (Appendix 4)
- Free State Health research committee – 18 October 2022
- Eastern Cape Health Research Committee – 19 October 2022

Thereafter, institutional permission was requested, and the outcomes were as follows:

- Hospital A – Permission granted 20 October 2022 (Appendix 4).
- Hospital B – Permission granted 2 November 2022 (Appendix 4).
- Hospital C – Permission cannot be attained unless ethics clearance is from The University of the Free State (UFS). The researcher explored the option of getting ethics clearance from UFS, however submission deadlines for 2022 had passed and it would have added to the expenses of the study. Due to budgetary and time limitations, this hospital was eliminated from the target population.
- Hospital D - Although permission was received from the Eastern Cape Health Research committee, institutional permission is still pending. Numerous emails and telecons ensued but to no avail, proving to be the most difficult hospital to deal with as communication was very difficult. Telephone lines were always busy, when they do answer, it was very noisy. When the researcher managed to speak to key individuals (CEO and PA), there was an indication that they are waiting on another department and the researcher must just wait for them to call. To date, the researcher is still awaiting their response. In addition, they are all on Gmail email addresses showing a lack of technology at the hospital, making communication difficult. As such, this hospital was also eliminated.

6.7.1 Hospital A

The data collection period was extended slightly as data collection was delayed due to protest action on 17 November 2022 and staff go-slow in the week of 21-27 November. However, some data was still collected during this period. Majority of the data was collected between 27 November – 10 December 2022. To get more responses, a research assistant who could speak five of the local languages assisted with collecting data. The respondents interacted well with the research assistant and appreciated being spoken to in their home language and they seemed to be more open to answering the questions.

6.7.2 Hospital B

Permission was not granted to collect data during the festive season of 2022 due to the high numbers of staff who were on leave, and it was a busy period for the hospital. There were also presumed issues with nursing management changing on a weekly or biweekly basis due to restructuring. The hospital only allowed the researcher to interact from staff on 23 January 2022 following a rigorous screening process. Data was collected from 23 January – 6 February 2023.

6.8 Pilot Testing

The primary goal of the pilot test was to gauge how well the responders understood the questions that were asked. Van Teijlingen and Hundley (2001) assert that pilot studies are a scaled-down version of comprehensive research. It is an essential component of an effective study design and helps with pre-testing an instrument, such as a questionnaire. Although conducting a pilot study increases the likelihood that the main study will be successful, this study's results could be negatively impacted by incorrect interpretation.

A request for a pilot study was attempted at Groote Schuur Hospital. An email to get permission was sent on 14 October 2022 in preparation for the planned pilot study upon approval of the proposal. Follow up telecons with key individuals proved unsuccessful.

The researcher then approached Hospital A and Hospital B to test the questionnaire on individuals who were not going to form part of the study consisting of administration staff who work at the management offices. A link to a google form was sent out daily during the period 5-12 November 2022, no response was received. It was then decided that an online

questionnaire will not work, and it was necessary to physically print out the questionnaires and travel to Hospital A. Upon arrival on 14 November, a pilot study was conducted with 10 administration staff on 14 November 2024 (1 day). Minor formatting changes were done to the questionnaire thereafter. The formatting changes included increasing the size of the blocks to facilitate longer responses. Also, the timeframe for completion of the questionnaire was adjusted. Once the questionnaire was piloted and finalised, it was administered within a specific timeframe outlined above in section 6.7.1 and 6.7.2.

6.9 Ethical considerations

To distinguish between practices that are viewed as acceptable and those that are regarded as unacceptable, ethics in research is a crucial component in the conduct of every study (Sobottka, 2016). According to Aluwihare-Samaranayake (2012), ethics in the context of research refers to the acceptance of morally correct or objectionable principles and rules in the pursuit of knowledge. The main goals of ethical research are to safeguard the researcher and the participants from dishonesty, manipulation, and potential harm, improve the research's integrity, and make sure that the university's policies and professional codes of conduct are followed (Aluwihare-Samaranayake, 2012). Thus, ethics in research establishes a moral framework to direct both the participants and the researcher's conduct.

The researcher proceeded with immense caution and took precise measures to circumvent the potential creation of ethical issues by developing and adhering to a data management plan (Appendix 3). The researcher adhered to the requirement stated in the Ethics Clearance certificate (Appendix 2) issued by the Cape Peninsula University of Technology (CPUT) Ethics committee based on the CPUT Policy on Research Ethics.

- The study was conducted according to the methods and procedures set out in the approved application.
- The research project adhered to all applicable national legislation, professional codes of conduct, institutional guidelines, and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, notably compliance with the Bill of Rights as provided for in the Constitution of the Republic of South Africa, 1996 (the Constitution) and where applicable: Protection of Personal

Information Act, No. 4 of 2013: Children's Act No 38 of 2002 and the National Health Act, No. 61 of 2003 and/or other legislations that is relevant was ensured.

- All fieldwork was conducted in 2022 before the ethics certificate expired.
- No personal details of respondents were collected to ensure anonymity.
- Respondents were allowed to withdraw at any time from the study and the responses were captured.

6.10 Coding of data

Creswell (2009) defines coding as the process of classifying data into textual segments or categories. Subsequently, a phrase is used to label each category. Coding, according to Ghauri and Gronhaug (2010) is the process of classifying and dividing data into useful analytical units. One of the easiest methods for analysing qualitative data, according to Myers (2019), is coding, which is the process by which a researcher employs a term to characterise or summarise a sentence, paragraph, or text passage. Coding, according to Flick (2014), is the process of coming up with ideas from the content and classifying passages from it. Similarly, Creswell (2009) claims that coding divides the material into manageable portions, enabling the researcher to assign labels to each unit and group the codes into themes. Both the questionnaire items and the transcripts of the structured interview responses were given numbers for this study. A Likert scale was used to score the respondents' responses making it possible for the researcher to classify the information and assign it to the study's themes.

6.11 Thematic analysis

Qualitative data was obtained from open-ended questions in the questionnaire from the respondents. Thereafter, a thematic analysis was conducted on the data obtained from the qualitative sections of the questionnaire. According to Kawulich and Holland (2012), a thematic analysis involves the identification of themes or patterns in the data. The data obtained are divided into sections and analysed for commonalities. The data was then categorised into themes. Where necessary, the themes are further categorised and displayed as sub-themes within the matrix of each theme (Bryman, 2012). Each theme and sub-theme was then coded, which helps to identify patterns in the data. The process is also known as the 'constant comparative method' (Kawulich and Holland, 2012). Thematic analysis is described as "a method for identifying, analysing and reporting patterns (themes) within data" (Braun and Clarke, 2006). The goal of thematic analysis is to identify and categorise themes to enable

interpretation of data and give the reader meaning. Themes should place more of an emphasis on data interpretation than data explanation. The relevance of data acquired through research questions is depicted by themes, which are then utilised to combine pertinent codes to demonstrate how the data are being evaluated (Castleberry and Nolen, 2018). According to Ibrahim (2012), thematic analysis helps researchers identify connections between concepts and compare these to the duplicated data. Any study that wishes to use interpretations will benefit from the usage of thematic analysis. Additionally, Kiger and Varpio (2020) note that qualitative researchers often utilises thematic analysis as a method for data processing. The versatility of thematic analysis, which may be used to a wide range of study designs, research objectives, and sample sizes, is a benefit. In the current study, the qualitative responses gathered from the questionnaires were explored for common elements and then labelled into themes. The themes were QWL, work life balance, challenges in service delivery, training, skills and the profile of the respondent.

6.11.1 Grounded theory

Grounded theory was utilised to discover specific themes after the data had been coded. Grounded theory is a qualitative research methodology that was first introduced by sociologists in the 1960's. The goal of grounded theory is to create a theory that is "grounded" in evidence, meaning that it is based on the participants' observations and experiences rather than pre-existing ideas or assumptions. The process of the grounded theory involves collecting and analysing data in a systematic iterative manner. The researcher begins by collecting the data through various methods such as interviews, observations or documents. In this study, a questionnaire was used. The data was analysed using a process of coding which involved identifying concepts and themes that emerged from the data. The codes were organised into categories and subcategories and the researcher uses the categories to develop a theory that explains the phenomenon being studied. The qualitative data was used to gather information about quality of work life, training and skills and service delivery. One of the key features of grounded theory is the emphasis on constant comparison, meaning that the researcher continually compares new data to existing data to identify similarities and differences and to define the emerging theory (Birks and Mills, 2022). The comparison of the themes to determine how they relate to the objectives and research questions, as well as the consequences of the findings, were considered.

6.12 Processing of data

Coding is the process of putting data into groups with similar meanings in order to cluster the relevant portions, making it easier to analyse and interpret. Coding breaks down enormous volumes of data into manageable portions, allowing the researcher to name each unit and group the codes into themes. Coding is the process of identifying and classifying data subsets using a code, which might be a term or a phrase. The researcher can use coding to convert raw data into useable data (Maguire and Delahunt, 2017; Creswell, 2014). Clarke and Braun (2017) define codes as more compact analytical components that highlight notable data aspects related to the research goals of the study. The construction of themes was primarily reliant on codes. The responses from the questionnaire were captured onto a spreadsheet using MS Excel. The spread sheet was then sent to the statistician who used SPSS to analyse the data.

The researcher conducted an analysis of the data after it had been gathered and coded. The Statistical Package for Social Sciences (SPSS) version 27.0 was used to analyse the quantitative data, which came from the questionnaire's closed-ended questions. SPSS is currently the statistical software tool that is most commonly used to analyse quantitative data in social sciences and is utilised in academic and professional contexts (Arkkelin, 2014).

In the quantitative data analysis, descriptive and inferential statistics were applied. Inferential statistics assisted the researcher in drawing inferences about the population, whereas descriptive statistics provided a summary of the data collected (Welman et al., 2005). According to Kothari (2004), quantitative data analysis is advantageous because the results are unambiguous and quantifiable. Additionally, factor analysis was used to identify interdependencies between the variables.

6.12.1 Descriptive statistics

Descriptive statistics in a mixed methods study contributes only to the quantitative component by summarising and describing numerical data, facilitating comparisons, integrating findings with qualitative results and aiding in the overall interpretation of the research (Wagner et al., 2012). They play a vital role in presenting a clear and comprehensive picture of the quantitative aspects of the study. Descriptive statistics are employed to summarise and describe the main features of a dataset which include measures such as mean, median, mode, range, and standard deviation which help researchers provide a concise and objective summary of the key

characteristics of the numerical data collected. In the current study, descriptive statistics assisted in the integration of quantitative findings with qualitative results. The researcher used quantitative summaries to complement and contextualise qualitative findings, providing a more comprehensive interpretation of the overall study.

6.12.2 Frequencies

When presenting data graphically or in a table format, the frequency distribution table is utilised. Wagner et al.(2012) states that the goal of creating a frequency distribution table is to show the frequency at which a particular score occurs. Next, the scores are arranged into what is known as "class intervals," which are ranges of equal size. A frequency distribution table was created for the investigation. The frequency table was utilised to create the graphs and distribution tables that are utilised to show the study's findings.

6.12.3 Mean, Median and Mode

Mean, median, and mode are measures of central tendency in statistics, and they are commonly used in research methodology to describe and summarise a set of data. These measures provide insights into the central or typical value around which data points tend to cluster.

One way to determine the central tendency in a collection of study findings is to compute the mean. The average score for the class or group is referred to as the means. Finding the score that most accurately reflects the scores in the data set is the goal of computing the mean in research. To find the mean, the research must sum up all the scores and divide the result by the total number of scores (Wagner et al., 2012). Even though the mean is determined in this study, percentages were used to report the results because they provide an accurate representation of the raw scores derived from the research findings. Researchers often use the mean to provide a numerical summary of a dataset, especially when the data is assumed to be normally distributed.

The distribution's midway point is known as the median. When there are extreme scores, the median represents the data set more accurately than the mean. The two middle scores' values are added, and the total is divided by two to determine the median. Unlike the mean, the median is not affected by extreme values. It is a robust measure of central tendency that gives a better representation of the "typical" value when there are outliers or skewed distributions.

The median is particularly useful when dealing with ordinal or interval data, where the concept of a true zero point might not exist (Wagner et al., 2012).

The score that appears the most frequently is the mode. The researcher can describe categorical or nominal data using the mode. In research, the mode describes how frequently a response occurs. The mode is particularly helpful in describing the most common observation in categorical or nominal data. In some cases, a dataset may not have a mode, or it may be difficult to determine a clear mode if many values have similar frequencies. Like the median, the mode is not influenced by extreme values, making it useful for datasets with outliers (Wagner et al., 2012).

6.13 Factor analysis

Factor analysis is an effective statistical approach that can assist researchers in finding patterns and relationships in large data sets, reducing the complexity of the data, and creating valid and reliable metrics for particular purposes. It is a useful tool to find patterns or links between a lot of different variables and to make the data less complex. It identifies and analyses the underlying structure and differences in a group of variables.

Factor analysis is utilised to create scales or measurements for particular constructs, including personality traits, attitudes, or beliefs. Researchers can create more accurate and valid assessments by figuring out the underlying causes that contribute to these constructs. A smaller set of factors that account for most of the variances in the first set of variables can be found using factor analysis. Factor analysis can assist when testing hypotheses on the relationships between variables particularly with large data sets.

The basic goal of factor analysis is data minimisation. Factor analysis is widely used in survey research to represent a large number of questions with a few imaginary components. Each question would be insufficient to assess attitudes towards work life quality and service delivery on its own, but when combined, they could produce more accurate answers. Factor analysis may be used to assess whether the three measurements genuinely measure the same item. In this situation, they can be combined to create a new variable, a factor score variable, which has a score for each responder on the factor and can be utilised in a variety of contexts.

For this study, Principal Component Analysis (PCA) was used for lowering the dimensionality of data while maintaining most of its variability, which contributed to identifying underlying components, followed by Promax rotation with Kaiser. Normalisation was used to improve the interpretability of the factor structure by allowing for correlation between factors. It was employed as an extraction method in component analysis to uncover the underlying factors responsible for the observed correlations between variables. PCA changed the original variables into a new set of uncorrelated variables known as principal components.

The Kaiser-Meyer-Olkin (KMO) and Bartlett's Test results are presented in the next chapter. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy must be more than 0.50 (as close to 1 as possible) and Bartlett's Test of Sphericity must be less than 0.05 in order to meet the criteria. Every time, the requirements are met, the factor analysis procedure is enabled. Only the Likert scale items are included for the factor analysis.

6.14 Inferential statistics

Additionally, inferential statistics were employed to allow the researcher to make inferences about the population from the data gathered from the sample (Wagner et al., 2012). When a researcher presents inferential statistics, it is appropriate to provide both positive and negative outcomes that are pertinent to the research topic (Omair, 2012). Inferential statistics is a field of statistics that includes making conclusions or predictions about a population using sample data. The goal of inferential statistics is to draw conclusions beyond the specific data that has been observed and to generalise those conclusions to a larger population. Such a process often involves hypothesis testing, estimating population parameters, and making predictions. Regression analysis is often used in inferential statistics to model relationships between variables. It helps researchers understand how changes in one variable are associated with changes in another and can be used for prediction (Wagner et al., 2012; Omair, 2012).

6.15 Reliability and Validity

The extent to which a study may be repeated and yield the same results is referred to as its reliability. According to Welman et al. (2005), reliability refers to the consistency, certainty, and trustworthiness of study outcomes. The reliability of the measurement tools was also evaluated by the study using statistical tests including the Cronbach Alpha and Persons Chi Square test. According to Field (2013), the Persons Chi Square test and Cronbach Alpha are

two of the most popular scale reliability tests. By pretesting the instrument used to collect data, it was possible to get information that was useful to ensure that the study could be easily duplicated with the same results. To assure reliability, the results were further evaluated by the supervisor and a statistician. Utilising the appropriate sampling methods also helped to guarantee reliability. The sampling procedure selected is thought to be suitable for ensuring the validity of the study's findings.

According to Welman et al. (2005), the degree of current data accuracy determines the validity of a piece of research. Poor samples, flawed techniques, and imprecise measurements of data collecting are some of the variables that may reduce the validity of the study's data. According to Kumar (2011), validity may be impacted by the correctness and accuracy of the measuring tool and is referred to as construct validity by Welman et al. (2005), and it means that the instrument selected to collect the necessary data must be appropriately developed to successfully achieve the study's objectives. Threats that could undermine the validity of the study were taken into consideration.

Whether the respondents worked as frontline staff at the hospital was determined in the first section of the questionnaires to ensure that the respondents belonged to the desired target audience. Only frontline healthcare workers who were in direct contact with the patients and involved with service delivery were permitted to respond to the questionnaire. All other workers who work in the background were not included as it would have compromised the reliability of the data collected. To assess the relevance of the questions in the questionnaire and to guarantee that the respondents comprehend the questions well, some were rephrased or altered following the pilot test. Additionally, participants received instructions from the researcher on site as they completed the questionnaire. Seniors also briefed staff via emails and staff meetings to ensure that the respondents understood the purpose of the study.

Triangulation was used to ensure validity. Wagner et al., (2012) claims that triangulation is a technique used to try and strengthen the validity of research evaluations by basing a study conclusion on many sources of information. To confirm the validity of the study evaluations, results from the qualitative and qualitative analyses were compared with previous research outlined in the literature review.

6.15.1 Chi-Square analysis

The chi-square ($\chi 2$) test can be utilised to ascertain the association between two variables in the population. The test is generated by adding the differences that are found between each cell's actual and predicted values in a cross-tabulation. The chi-square is interpreted considering the statistical significance level that corresponds with it, which in this study is denoted by the symbol $p<0.0001$. indicating that there is just 1 in 10,000 risk of incorrectly rejecting the null hypothesis. A null hypothesis, according to Wagner et al. (2012), asserts that there is no connection between the variables under investigation.

Chi-square analysis is used when dealing with categorical variables. It assesses whether there is a significant association or difference between two categorical variables. There are two main types of chi-square tests: the chi-square test for independence and the chi-square test for goodness of fit. The chi-square test for independence is used when examining the association between two categorical variables, testing whether the distribution of one variable is independent of the other. The chi-square test for goodness of fit is used to determine if the observed categorical data matches the expected distribution (Bryman, 2012).

6.15.2 Cronbach's alpha test

An instrument used in research can be evaluated for internal reliability using the Cronbach's alpha test. It is employed to ascertain the degree of relatedness among a group of variables. The Cronbach's alpha test is based on inter-item correlation and measures the average of all potential split-half reliability coefficients. The author also points out that a reliability coefficient of .70 or more is deemed appropriate in the majority of social science studies such as this one.

6.16 Limitations of the study

Only frontline healthcare employees who work in public central hospitals that were registered in the NHQIP as a Quality Learning Center (QLCs) were eligible to take part in the study. It is significant to remember that issues could differ depending on where you are in South Africa. Only Gauteng and KZN hospitals were included in the sample due to permission issues. Furthermore, various populations may have varied perceptions of service quality. In order to obtain a clear indication of the holistic approach, it is possible to reproduce the study in each of South Africa's nine provinces at other types of hospitals, such as tertiary, regional, and

district hospitals. As a result, the findings of the study might not be representative of the entire healthcare sector in South Africa. The study examined service quality internally rather than from the viewpoint of patients. Additionally, the study used a purposeful sampling technique which may have restricted population representation. The findings cannot be extrapolated to other hospitals that do not serve the general public. Additional research may also focus on primary care settings such clinics, EMS stations, and community health centres.

6.17 Conclusion

The process for gathering the data was detailed in this section. The numerous approaches, sampling strategies, and data processing methods used to deliver the study's findings were demonstrated in this chapter. The administration and design of the questionnaire, which helped the researcher get responses to the research questions and accomplish the study's aim, were carefully thought out. The researcher was able to get genuine and trustworthy results thanks to the research into acceptable methods, guaranteeing that the findings were unbiased and uninfluenced by the researcher's personal thoughts and beliefs. The results of the data collection are presented in the following chapter.

CHAPTER SEVEN

PRESENTATION AND DISCUSSION OF RESULTS

7.1 Introduction

The methodology for the study was examined and the methods for sampling and data collection, reliability and validity were outlined in the preceding chapter. A summary of the data analysis from the primary research is provided in this chapter and is discussed using tables, graphs and charts. Data pertaining to the major themes will be highlighted and examined using various methodologies. The themes include training, work-life quality, job satisfaction and challenges related to service quality and service delivery will be discussed.

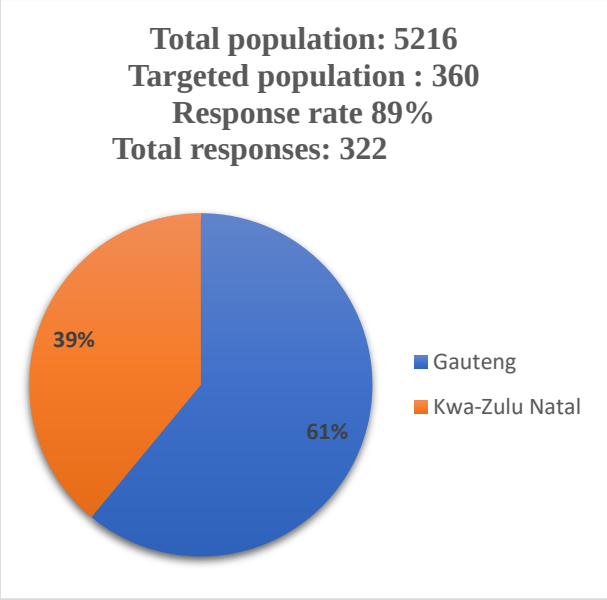
7.2 Statement of findings, interpretation and discussion of the primary data

This portion of the chapter provides and discusses the outcomes of data collected through questionnaires. The questionnaire was the primary data collection method, and it was delivered at two public central hospitals in two distinct regions of South Africa. SPSS version 27.0 was used to examine the data received from the replies. For the quantitative data obtained, the results are provided in the form of graphs, cross tabulations, and other figures. Correlations and chi square test findings, which are interpreted using p-values, are examples of inferential procedures. Thematic analysis was used to analyse the responses to the qualitative questions, which will be explained when the qualitative findings are provided after the quantitative discussions.

7.3 The Sample

Due to challenges with attaining permission, only two hospitals formed part of the sample. The two central hospitals were located in the provinces of Gauteng and KwaZulu-Natal in South Africa and were listed on the NHQIP programme. In the study, 180 responses from each hospital was targeted. However, only 322 questionnaires in total were completed and captured. A response rate of 89% was achieved. Figure 7.1 illustrates the sample size distribution which reveals that 61% of the respondents came from the Gauteng province and 39% came from KwaZulu-Natal.

Figure 7.1: Sample size distribution



7.4 The research instrument

There were 31 items in the research instrument which was used to collect the data with a level of measurement at a nominal or an ordinal level. Based on the objectives of the study, the questionnaire was divided into three sections containing questions under specific themes as follows:

Section A – Profile

Section B – Training and skills

Section C – Quality of work life

Each section was carefully detailed to meet the objectives of the study.

The questionnaire was carefully designed to reach the objectives of the study as shown in Table 7.1 which summarises how the data will be analysed. Quantitative questions will be analysed in section 7.9 and qualitative questions will be analysed in section 7.10.

Table 7.1: Summary of questionnaire to be analysed

Question	Discussed in Section 7.9	Discussed in Section 7.10	Linked to objective
Section A - Profile			
1.	Quantitative		Profiling question (Age)
2.	Quantitative		Profiling question (Gender)
3.	Quantitative		Profiling question (Cultural group)

4.	Quantitative		Profiling question (Years of service at the institution)
5.		Qualitative	Profiling question (Best aspects of the job)
6.	Quantitative		Profiling question (Department of employment)
7.	Quantitative		Profiling question (Years of service at previous job)
8.		Qualitative	Profiling question (Reason for leaving previous job)
9.	Quantitative		Profiling question (Years of service as a frontline healthcare worker)
10.	Quantitative		Profiling question (Level of Seniority)
11.	Quantitative		Profiling question (Years of service in current position)
12.	Qualitative		Profiling question (Location)
Section B - Training and skills			
13.	Quantitative		Objective 1 and 2
14.	Quantitative		Objective 1 and 2
15.		Qualitative	Objective 1 and 2
16.		Qualitative	Objective 1 and 2
17.	Quantitative		Objective 1 and 2
18.	Quantitative		Objective 1 and 2
19.	Quantitative		Objective 1 and 2
20.	Quantitative		Objective 1 and 2
21.		Qualitative	Objective 1 and 2
22.	Quantitative		Objective 1 and 2
Section C - Quality of work life			
23.	Quantitative		Objective 3
24.	Quantitative		Objective 3
25.	Quantitative		Objective 3
26.	Quantitative		Objective 3

27.	Quantitative		Objective 3
28.	Quantitative		Objective 3
29.	Quantitative		Objective 3
30.		Qualitative	Objective 3/4
31.		Qualitative	Objective 3/4

Table 7.1 describes how the data will be discussed in this chapter. Column 1 contains the question number, while column 2 indicates that the topic is quantitative in nature and will be examined further in section 7.9. Column 3 indicates that the question is qualitative and will be examined in section 7.10. Column 4 indicates which study objective the question aligns with. Section A does not align with any objective because the questions are designed to describe the respondents based on demographics and work life statistics.

7.5 Reliability statistics

The two most important aspects of accuracy are reliability and validity. To calculate dependability, many measurements are done on the same subjects. An appropriate Cronbach's alpha reliability coefficient is one that measures 0.60 or above for a newly developed questionnaire. Table 7.2 displays the Cronbach's alpha scores for the items of the questionnaire.

Table 7.2: Cronbach's alpha score

Section	Question	Number of items	Cronbach's Alpha
B – Training and Skills	18	9	.937
		8	.937
		7	.701
	22	3	.766
		2	.886
C – Quality of Work life	24	7	.855
		3	.769
		3	.746
	25	2	.511
		2	.361
	26	4	.886
		3	.739

		3	.654
		2	.503
		2	.266
	27	4	.771
		2	.903
		3	.632
		2	.822
	28	5	.801

Most of the reliability scores were higher than the suggested Cronbach's alpha value of 0.60. demonstrating a level of acceptance for these sections of the research. Cronbach's alpha is used to measure internal dependability (Bryman, 2012: 170). It computes the mean of all split-half reliability coefficients. An appropriate degree of internal reliability is commonly recognised to be between 0.70 and 0.80. Furthermore, the study's questionnaire was pre-tested to verify dependability. A factor analysis was performed to guarantee the quantitative study's validity. Triangulation and pre-testing of the questionnaire are employed to assure the validity of the qualitative investigation.

7.6 Factor Analysis

The study employed factor analysis to investigate relationships between variables and discover underlying factors that explain patterns of correlation or covariance between them. The primary reason for using factor analysis was to reduce a large number of observed variables to a smaller number of unobserved variables known as factors. These factors captured the observed variables' shared variation and aid in data interpretation.

7.6.1 Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

The Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity were used for factor analysis to assess the suitability of data for factor analysis in the study. These two tests were of relevance to determine if factor analysis is appropriate for the dataset. A high KMO measure and a significant result from Bartlett's test suggested that the data was suitable for factor analysis.

The KMO measure was used to evaluate the sampling adequacy of the data and ensured that the variables are suitable for factor analysis. It also assessed the degree of correlation between variables and determined if there was enough common variance present to conduct a reliable factor analysis. The KMO measure ranges from 0 to 1, with values closer to 1 indicating higher sampling adequacy. A KMO value above 0.6 or 0.7 is often considered acceptable (Moonsamy and Singh, 2014).

Bartlett's test of sphericity, on the other hand, evaluated whether the observed variables in a dataset are correlated enough to perform factor analysis. It tested the null hypothesis that the correlation matrix is an identity matrix, meaning variables are uncorrelated. If the p-value associated with Bartlett's test is below a certain significance level (e.g., 0.05), then the null hypothesis is rejected, indicating that the correlation matrix is not an identity matrix, and it is suitable for factor analysis.

The Kaiser-Meyer-Olkin (KMO) and Bartlett's Test results are summarised in Table 7.3. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was more than 0.50 (as close to 1 as possible) and Bartlett's Test of Sphericity was less than 0.05.

Table 7.3: Kaiser-Meyer-Olkin and Bartlett's Test

			Bartlett's Test of Sphericity		
Section	Question	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Approx. Chi-Square	df	Sig.
B – Training and skills	18	.934	4956.402	190	.000
	22	.647	765.657	10	<.001
C – Quality of Work life	24	.803	1843.918	78	.000
	25	.534	64.164	6	<.001
	26	.780	1489.410	91	<.001
	27	.669	1156.607	78	<.001
	28	.736	509.988	10	<.001

Figure 7.3 highlights that all of the conditions are satisfied for factor analysis, that is, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy value should be greater than 0.500 and the Bartlett's Test of Sphericity sig. value should be less than 0.05.

7.6.2 Principal Component Analysis and Rotated Component matrix

Principal Component Analysis (PCA) was used for reducing the dimensionality of data while retaining most of its variability. Additionally, PCA assisted to identify underlying factors, and then applying Promax rotation with Kaiser Normalization to improve the interpretability of the factor structure by allowing for correlation among factors. In the context of factor analysis, it was used as an extraction method to identify the underlying factors that explain the observed correlations among variables. PCA transformed the original variables into a new set of uncorrelated variables called principal components. These components are linear combinations of the original variables.

Rotation is a step-in factor analysis, that aimed to simplify the interpretation of the factors. The goal was to achieve a clearer and more interpretable factor structure. Promax rotation was a type of oblique rotation, which allowed the factors to be correlated. It is often preferred when there is theoretical reason to believe that factors are correlated. Kaiser Normalization helped in simplifying the interpretation of the factor structure.

The researcher interpreted these factors in terms of the underlying constructs they represent which will be elaborated on when factor analysis is used to interpret the data in the relevant questions. They are discussed with the pattern matrixes in the relevant quantitative questions.

7.7 Correlations

For the current study nonparametric, bivariate correlation was performed on the (ordinal) data. The correlation coefficient used was Spearman's rank correlation coefficient which assesses the strength and direction of the monotonic relationship between two variables. It is based on the ranks of the data rather than the actual values. Spearman's correlation is suitable for ordinal, interval, or ratio scale data. Positive values indicate a direct proportional relationship between the variables and a negative value indicates an inverse relationship. All significant relationships are indicated by an * or **.

For example, the correlation value between “Attitude towards team and teamwork” and “Support from team and seniors” is 0.526. directly related to proportionality. Respondents indicate that the better there is a better attitude towards the team and higher levels of teamwork when there is support from the team and seniors.

Negative values imply an inverse relationship. That is, the variables have an opposite effect on each other. For example, the correlation value between “Accomplishments being recognised and training opportunities?” and “Attitude towards work & people” is -.023. That means, if there is less recognition for accomplishments and less training opportunities, the attitude towards work and people is likely to be low (See correlation chart appendix 5).

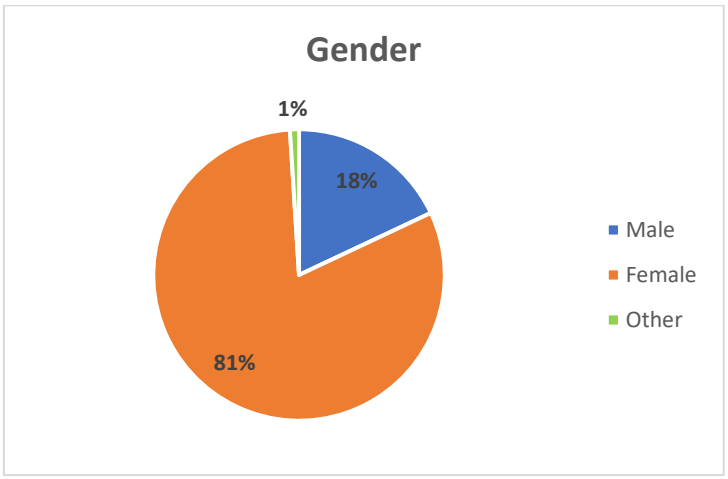
7.8 Discussion of Quantitative data and findings

Quantitative data was gathered using rating questions/Likert scales and tick boxes. Data on opinions was gathered using rating questions. The Likert-style rating scale was used frequently in the rating questions, which asked respondents to rate how strongly they agree or disagree with a statement or set of statements. A five-point Likert scale was used as part of the questionnaire used in the investigation. Tick boxes to choose the most appropriate choice was also used.

7.8.1 Section A – Profile and employment status

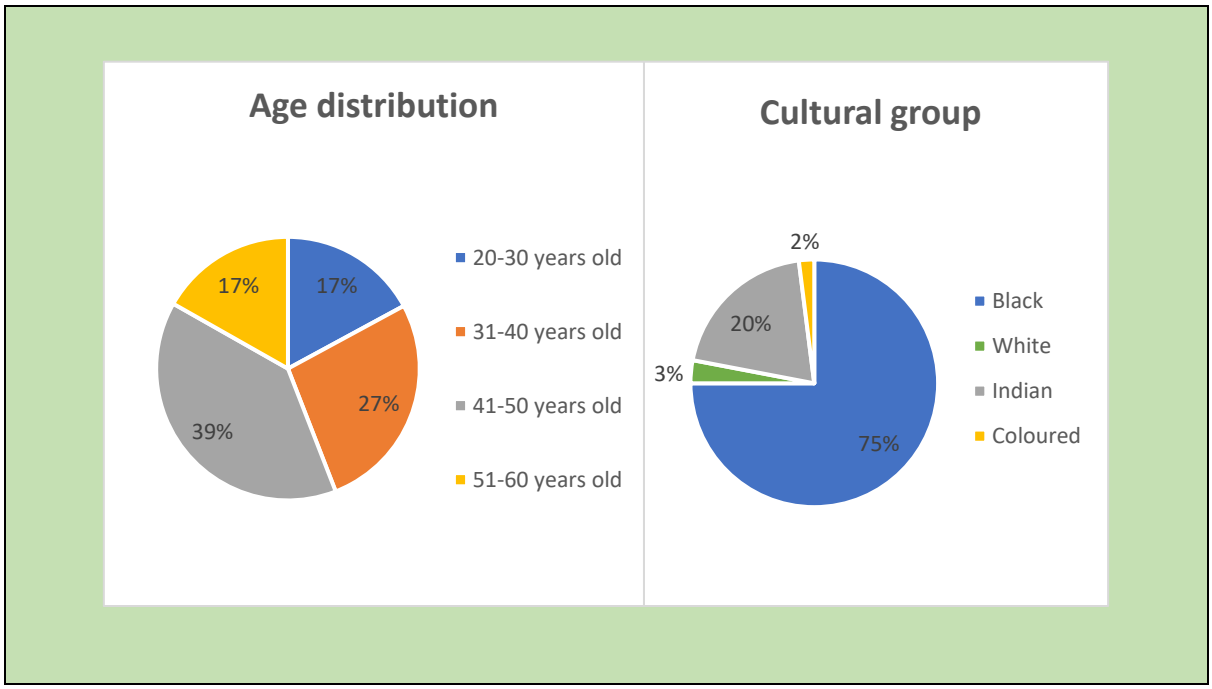
For the purpose of gathering biographical data on the respondents’ demographics, this component invited employees to specify data about their demographics such as gender, age, cultural group, number of years employed and nature of employment and job status. The data was crucial since it establishes the characteristics of the research population and establishes alignment with the inclusion criteria.

Figure 7.2: Gender Distribution



Overall, there is a higher proportion of females (81%) compared to males (18%) who work in frontline positions at the selected hospitals as depicted in Figure 6.3. The ratio is in line with the general assumption that the healthcare industry has a dominance of female employees which is consistent with global trends because women form 70% of the global healthcare workforce (WHO, 2019). Understanding the age and cultural group of the respondents may give insight into how each group experience the QWL and how it impacts on the manner in which the service is delivered.

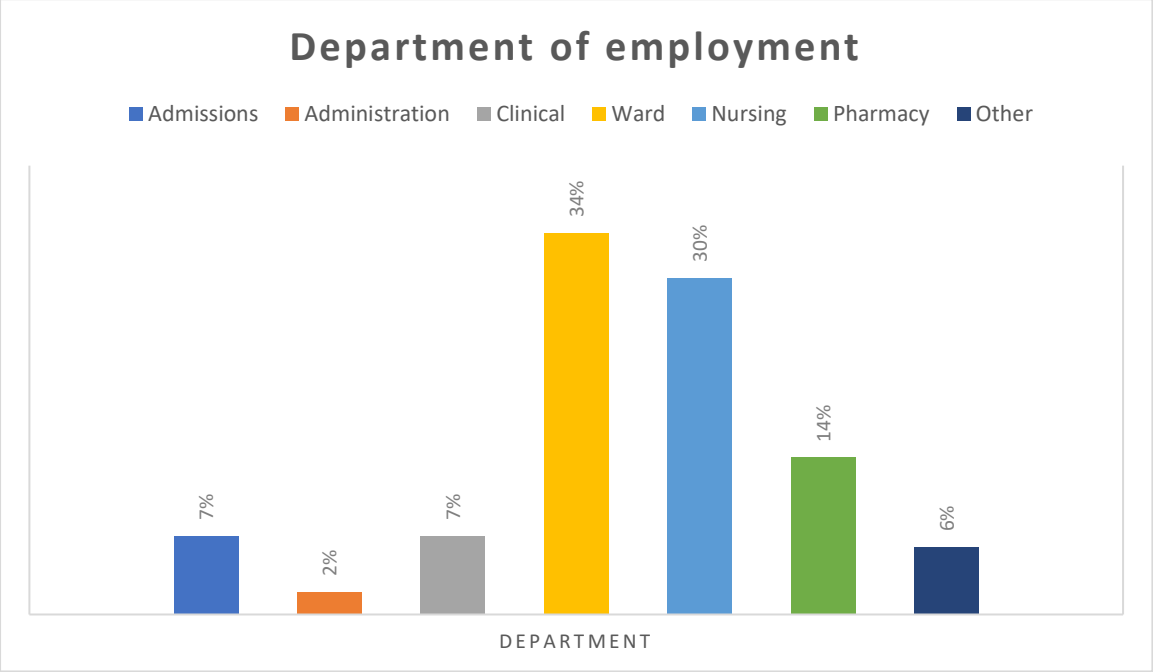
Figure 7.3: *Age distribution and cultural group*



There is an equal amount of young people (20–30-year-old) and older people (51-60 years old) who are close to retirement, with each group displaying a 17% representation. As one group retires, the other group steps in to fill the gap, which may be advantageous to the industry. The 41–50 age group has the highest presence (39%) and the 31–40 age group is close behind (27%). With such a wide range of ages, it is reasonable to anticipate that the different groups can share a variety of levels of life skills. Moreover, the black population is well represented (75%), while the Indian (20%), white (3%) and coloured population (2%) form a total of 25%. South Africa is a multicultural country, and the cultural representation is synonymous with the overall population dynamics.

Overall, the data from Figure 7.3 and Figure 7.4 set the scene for later discussions based on the objective of the study.

Figure 7.4: Department of employment



As with all successful institutions in any field of business, there are different departments that contribute to the success of the operations. It could range from back of house departments such as finance, human resources and information technology to frontline departments including all departments that deal directly with the customer. In the case of hospitals, we refer to customers as patients. Figure 7.4 reveals the department that the respondents work at, assuring that the strict inclusion criteria was adhered to. All respondents worked in frontline positions mainly in

the wards (34%), as nurses (30%) constituting a total of 64%. There are administrative (2%) and admissions positions (7%) which require staff to interact with patients. These staff do not perform clinical treatments, but they are there as support staff to assist with paperwork. Clinical staff (7%) included the doctors who were on duty during the data collection period. The pharmacy staff (14%) are involved with dispensing medication and communicating to the sick patients about how to take the medication so that they heal. There was a small percentage of staff who were classified under "other" (6%). These staff members worked at the wellness centre (3%), radiology (1%) and quality assurance (2%). All classified under the "other" label were frontline positions in the following ways:

1. Wellness centre: Provide healthcare services for staff who classified as patients,
2. Radiology: Taking care of the imaging needs to aid diagnosis,
3. Quality Assurance: Dealing with and investigating the complaints from patients.

Table 7.5 reveals important employment timelines to understand the commitment levels.

Table 7.5: Employment timelines

Time spent	Time as frontline healthcare professional	Time at current employment	Time in current position	Time in previous employment
Under 1 year		13%	10%	15%
1 - 5 years	20%	21%	34%	33%
6 - 10 years	17%	19%	25%	17%
11 - 15 years	27%	23%	17%	7%
16 - 20 years	14%	9%	7%	3%
More than 20 years	22%	15%	7%	5%
No previous employment				20%

Analysing employment timelines can provide valuable insight into an employee's work history which can be useful when assessing commitment levels, promotion potential and gaps in needs such as training and skills. The overall career trajectory can be understood by analysing the employment timelines. It can also help to identify how an employee's career has progressed over time which will provide insights into their skills, experience and performance. Analysing employment timelines can also help identify patterns of job hopping which may indicate difficulty to commit to a job or unable to find a good fit in a particular role.

Table 7.5 indicates the largest number of responses (25%) came from frontline employees who have worked in their current position for 6-10 years and at the same hospital for 11-15 years (23%). When the percentages are added up, a majority of 63% of the employees have worked in frontline positions for 11-20 years showing high levels of experience and possible accumulated skills. A total of 48% of the frontline employees changed their jobs in 5 years, indicating difficulty to commit or find a good fit.

Figure 7.5: Level of seniority

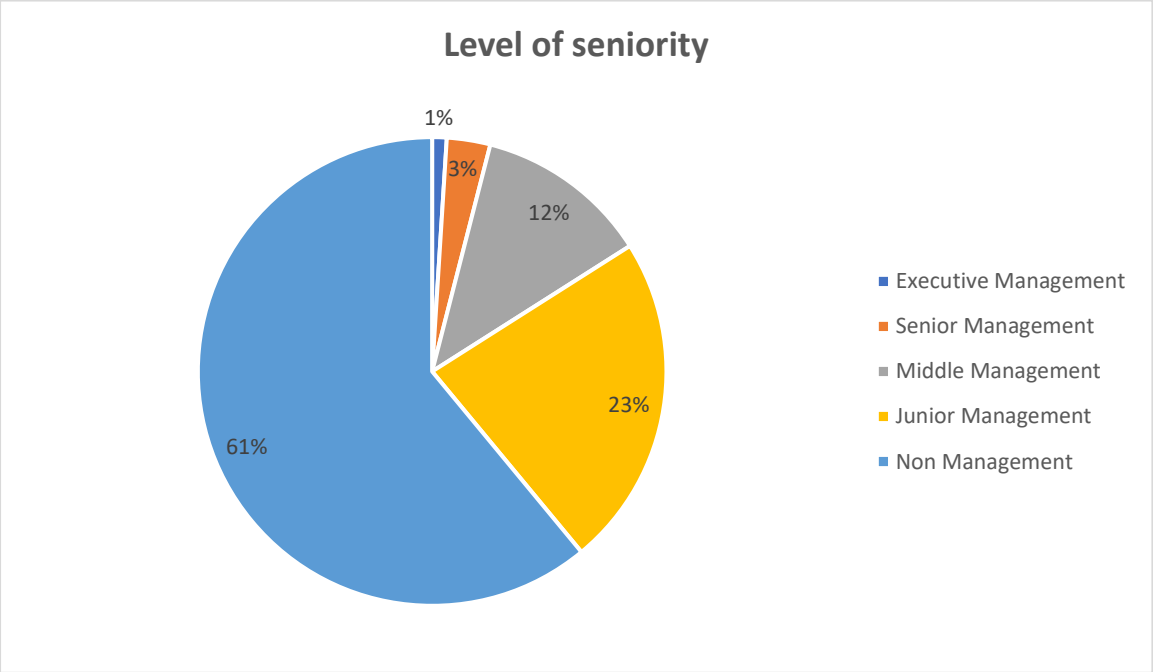


Table 7.5 compares with Figure 7.5 above, 27% of the employees have worked in frontline positions for 11-15 years and 23% have spent 11-15 years at their current employment, while 25% are in their current employment for 6-10 years revealing that upward movement into management is either not desirable or takes a long time to achieve. Figure 7.5 indicates that

that 61% of the respondents were non-management staff revealing that management staff may not be involved in frontline operations. Perhaps, it can be flagged as a fundamental flaw in the system.

There is a small population of 20% who indicated that it is their first job (Table 7.5), signifying a need for training and skills development which will be discussed next, where the quantitative data from Section B of the questionnaire will be presented and interpreted.

7.8.2 Section B – Training and Skills

This section is dedicated to eliciting information regarding the skills and training of the respondents. The data presented is linked to objective 2 that assess the knowledge and skills acquired from the healthcare quality management training. Objective 1 is also addressed, where the expectations of the frontline employees after they attended the training is examined.

Table 7.6: Training received

Question	Yes	NO
Have you received training based to improve the quality of healthcare that you provide?	73%	27%
Did the training help you improve your knowledge and skillset?	69%	31%

According to Table 7.6, 73% of the respondents received training, and 69% believe that the training was beneficial in enhancing their knowledge and skill set. However, we need to ascertain which skills were improved because, as 31% of respondents noted, not all training contributed to knowledge and skills advancement. Training alone cannot teach all skills as shown. Collaboration with other service industries such a hospitality may be instrumental in improving the skillset of hospital workers. It can be concluded that although training is important, the right training programmes will bring out the best in hospital staff (Bala, Yerra, Katkuri, Podila and Animalla, 2022). Staff were appreciative of the training but called for more relevant training which will not only enhance service delivery but also provide a platform for self-development and career advancement opportunities. Additionally, implementing training grounded on the hospitality model may help healthcare professionals develop a strong emotional connection with patients, which is essential for their involvement, confidence and healing (Poorani et al., 2023).

Data from this sub-section was analysed through the extraction method with the Principal Component Analysis (PCA) which is a statistical technique used to reduce the dimensionality of a data set by identifying and extracting the most important features, or the principal components, that capture the majority of the variance in the data. A factor analysis rotation method, Promax with Kaiser Normalization was utilised. Promax rotation is a method used to help interpret the principal components derived from PCA. It is a type of oblique rotation that allows the principal components to be correlated with each other and can be helpful when the underlying factors in the data are expected to be correlated. The rotation can be calculated quickly, and it is useful for large data sets. Kaiser normalisation, also known as Kaiser scaling or Kaiser standardisation, is a method used to scale the data before performing PCA. It involves subtracting the mean of each variable from the data and then dividing by the standard deviation ensuring that each variable has equal weight in the PCA analysis.

The table below is of utmost importance. The three components are given with the items that makes up each of the constructs. The questions that are missing have been discarded since they load onto more than one construct. Exploratory factor analysis using Principal Component Analysis (PCA) with Promax rotation was performed to determine the acceptable correlation among variables, i.e., if the reliability and validity criteria were met or not. Promax was chosen for two reasons: first, because of the high sample size (n=322), and second, since Promax has been deemed a useful instrument for the correlation of various components. Those that did not load well was dropped.

Table 7.7: Pattern Matrix-Important skills for frontline healthcare workers

	Component		
	1	2	3
Responsibility	.968		
Professional	.867		
Accountability	.838		
Observant	.796		
Reliable	.791		
Team player	.738		
Communication	.707		
Empathy & Patience	.702		

Confidence	.544		
Assertiveness		.919	
Attentive		.875	
Receptive attitude		.871	
Adaptability		.805	
Active learner		.722	
Ability to manage stress		.709	
Positive attitude		.684	
High work ethic		.669	
Digitally savvy			.918
Technical skills			.744
Flexibility			.628

Extraction Method: Principal Component Analysis.
Rotation Method: Promax with Kaiser Normalization.
Rotation converged in 5 iterations.

Based on the item loading on each factor and the interpretation from the factor analysis, three components/factors were identified regarding important skills for the frontline healthcare workers. Factor 1 had the loading of 7 variables. These variables were responsibility, professionalism, accountability, observant, reliable, team player, communication, empathy and patience and confidence which loaded as 0.968, 0.867, 0.838, 0.796, 0.791, 0.738, 0.707, 0.702 and 0.544 respectively and can be classified under the theme “dependable skills.” Factor 2 had the loading of 8 variables namely assertiveness, attentive, receptive attitude, adaptability, active learner, ability to manage stress, positive attitude and high work ethic which loaded as 0.919, 0.875, 0.871, 0.805, 0.722, 0.709, 0.684, 0.669 respectively and can be classified under the theme “decisive skills.” Factor 3 had the loading of 3 variables which included digitally savvy, technical skills and flexibility which loaded as 0.918, 0.744, 0.628 respectively and can be classified as digital skills. Three factors loaded in the pattern matrix (Table 7.7). The factor loadings are close in magnitude ranging from 0.544 to 0.968 which is closer to 1 showing high intra correlation in the groups. Each variable had all the communalities significantly high with most being above 0.544.

Based on the factor analysis 3 themes emerged when gaining the perception of important skills for frontline healthcare workers. The discussion of the skills that are included in each theme will follow after Figure 7.6.

Figure 7.6: Important skillset for frontline healthcare workers

Dependable

The first D is “Dependable” and showed strong factor loading on responsibility as it was close to 1 but not 1. Factor loadings are close in magnitude indicating high intra correlation in the group. High degrees of professionalism and accountability, in addition to responsibility, were flagged as the most important skills under the theme of dependability. Frontline healthcare professionals must be observant of the patients and their environment, which calls for empathy, compassion, and confidence. The ability to effectively communicate treatment measures to the patient and the team is essential to the job thus increasing confidence between the team members and with the patients, making dependability and reliability inevitable.

Decisive

"Decisive" is the second D. Under this theme, assertiveness and being attentive were shown to have significant factor loadings. Front-line healthcare workers must have a receptive attitude and be adaptable in a constantly changing environment. Frontline healthcare workers who can effectively handle stress and are active learners will be better able to maintain a positive attitude and demonstrate excellent work ethics. Decisive behaviour requires a certain degree of assertiveness which can be derived from knowledge that is attained from being an active learner. If the frontline employee is attentive and has an open receptive attitude, decision making is easier. When proper, well-informed decisions are made, it is easier to manage stress and fosters a positive relationship amongst the team and the patients.

Digital

The third D is "Digital" skills. Technical expertise is a must for the frontline positions in the healthcare sector. The capacity to efficiently use digital technology is known as being digitally savvy/smart. Frontline workers have the flexibility they need to successfully execute jobs efficiently when they are technologically knowledgeable. The digital skill requires constant training to keep up with the latest developments in technology.

When measuring perceptions of training opportunities at work, the pattern matrix presented in Table 7.8 is of high importance. The two components are given with the items that makes up each of the constructs. The questions that are missing have been discarded since they load onto more than one construct.

Table 7.8: Pattern Matrix - Perceptions of training opportunities at work

	Component	
	1	2
My accomplishments are recognised by my team.	.962	
My accomplishments are recognised by my seniors.	.905	
There are training opportunities available for me to improve my professional skills.	.564	
I DID receive support to attend the training sessions.		.969
I received great support to attend the training sessions.		.911

Extraction Method: Principal Component Analysis.
Rotation Method: Promax with Kaiser Normalization.
Rotation converged in 3 iterations.

Based on the item loading on each factor and the interpretation from the factor analysis, two components/factors were identified. Factor 1 had the loading of 3 variables and factor 2 loaded two variables. These variables were statements and can be classified under two themes:

- Factor 1: Recognition of accomplishments and training opportunities
- Factor 2: Support for training

Leaders must be committed to provide the opportunities to all participants to not only to participate in all classes but also facilitate innovative ideas for process improvement (Poorani,

Kline, DeMicco, and Sullivan, 2023). The low factor loading of .564 expose that there is a scarcity of training opportunities available for the frontline employees to improve their skills. However, when an opportunity arises there is great support to attend as per factor loading .969 and .911 in component 2. It appears that the team recognised the accomplishments slightly more than the seniors, but the difference is not significant as shown above in Table 7.8 where component 1 loaded as 0.962 vs 0.905 when comparing the recognition by the team versus the seniors. These may be significant factors to consider when trying to develop microsystems to drive quality improvement.

Agency for Healthcare Research and Quality (2020) proposed the idea of microsystems, which was thought to be an effective technique for health organisations to enhance operational procedures. A microsystem, which refers to the numerous small units of caregivers, administrators, and other employees who provide care and services on a daily basis, can be thought of as having supportive team members who are well-trained. By implementing procedures and having members support one another, the microsystem approach aims to equip employees to deliver effective, superior clinical, and patient-centred care to patients. Support and training are essential since learning and improvement in a microsystem depend on measurement and performance feedback. A quality improvement intervention can be scaled up to other microsystems or implemented elsewhere if it is successful for one.

Figure 7.7: Awareness of training opportunities

Figure 7.7 reveals that there is not a vast difference between the awareness levels of training that is available to staff. Staff are aware of the skills that they need to upgrade but only 50% are aware of courses that are available to them. The balance are either indicated that there are no courses available at the hospital (48%) or that they are unsure if there are courses available (2%). Awareness can be achieved with communication which seems to be the underlying problem. These results are consistent with (Regmi and Jones, 2020) who, in their systematic literature review, discussed four barriers affecting e-learning in health sciences education. Poor motivation and expectation from the staff, the courses are resource-intensive and may be unsuitable or irrelevant for the skills required and lastly a lack of IT skills may be the reason for poor communication. As communication can be more efficient using information technology, many employees may be excluded from the communication chain due to the lack of skills possessed.

Interpretation and discussion of qualitative data based on training and skills in Section 7.10 will add more depth to these findings.

7.8.3 Section C - Quality of work life

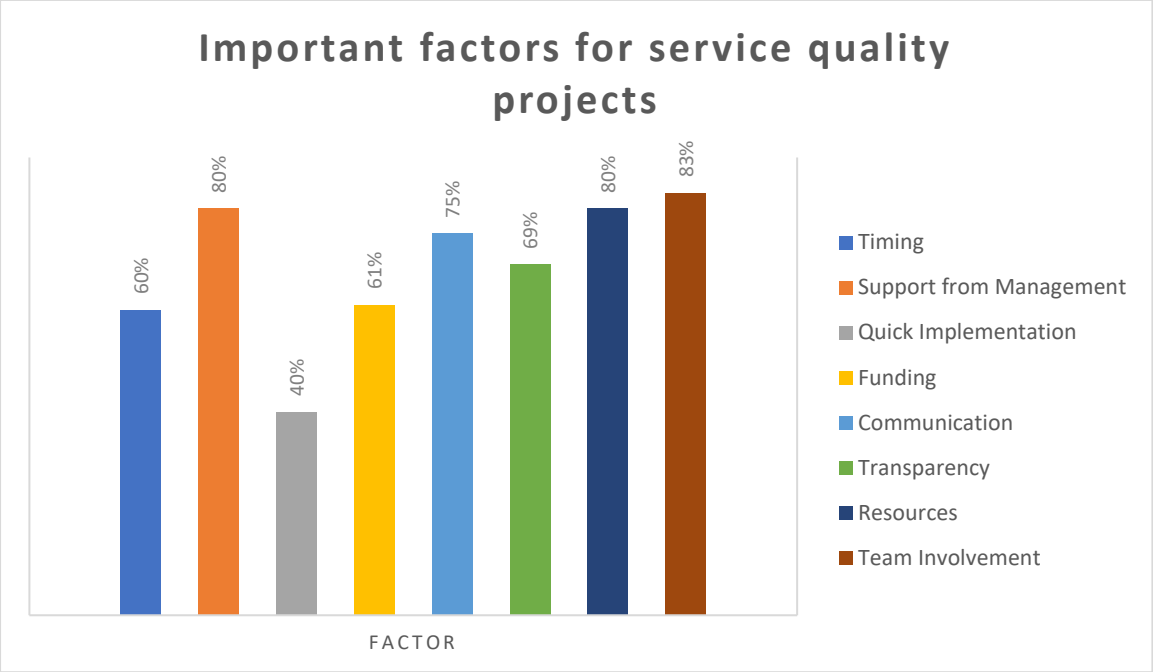
The purpose of this section is to elicit data regarding the respondents' quality of work life (QWL). By employing a series of closed-ended questions with tick boxes and Likert scales, the study proposed to identify the QWL experienced by frontline healthcare professionals to meet objective 3.

South Africa's healthcare sector has developed and implemented several quality improvement plans that focus on improving the quality of healthcare services in the country. These quality improvement plans aim to eradicate the existing challenges in the healthcare sector and establish a healthcare system that is efficient, effective and equitable to all South Africans. While these plans have been in place for several years, monitoring and evaluation of their implementation through data collection, analysis and reporting will improve transparency and accountability, eventually leading to a successful implementation (Moldovan et al., 2022).

While planning and development is important, there are certain factors that must be considered during the implementation stage of projects. Figure 7.8 highlights the critical success factors

as perceived by the frontline workers that must be considered during implementation of projects related to quality of service delivered.

Figure 7.8: Critical success factors when implementing service quality projects

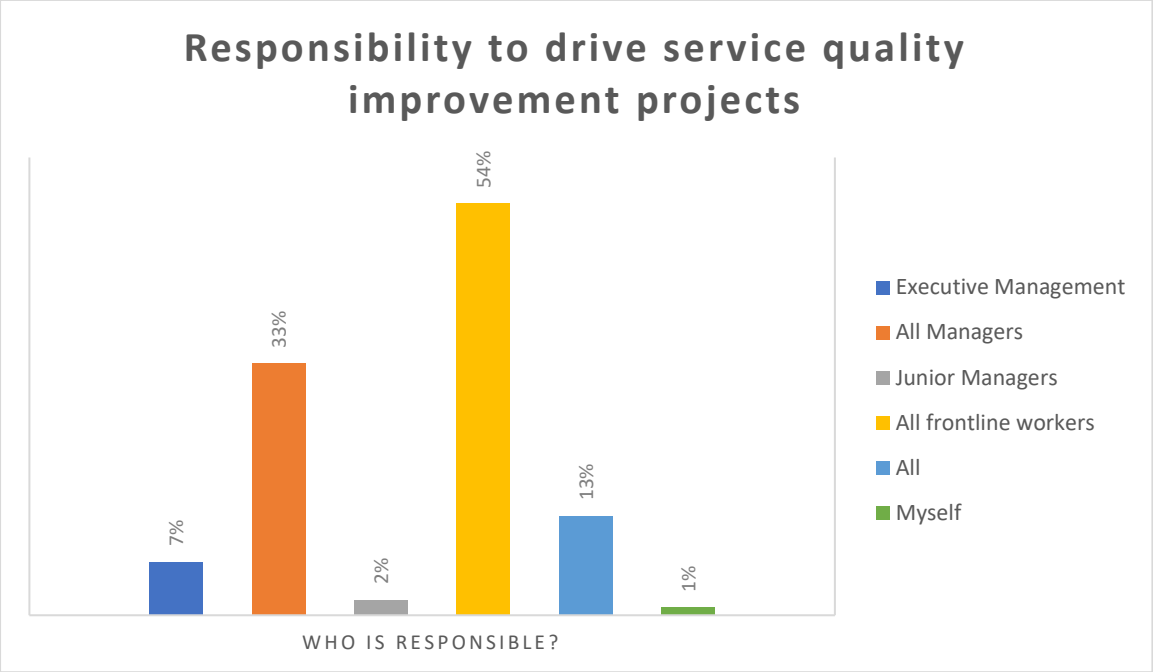


The results appear to be consistent with the literature indicating that team involvement (83%), resources (80%) and support from management (80%) forms the foundation of implementing successful projects. All projects need necessary funding to procure the necessary resources (human and material) to facilitate success. Funding (61%) is normally distributed by managers, so the results highlight that support from management is important. If these factors are not available, it might be impossible to achieve the objectives of the project. Next in priority is communication (75%) and transparency (69%) about how the project is going to roll out. Communication amongst all relevant groups is imperative which enforces team involvement. Sixty percent of the respondents indicated that timing is also important to consider. For e.g., if the service quality project involves training, then all required groups must be available for the training.

Only 40% of the respondents indicated that speed is important. Quick implementation may not be the best way when implementing projects, but it is very dependent on the type and scale of projects. Small projects which involve only one department might be easier and quicker to

implement, while big projects may take a little longer (Agency for Healthcare Research and Quality, 2020).

Figure 7.9: Responsibility for quality



Using a nominal question which is a type of question that presents respondents with multiple answer choices which were non-numerical in nature, the question aimed to ascertain the perception of the respondents regarding responsibility. Most of the respondents (54%) believe that all frontline workers are in charge of implementing plans to improve service quality at their institution. One third of the respondents (33%) indicated that implementing service quality programmes is a managerial task and 13% indicated that it is everyone's duty. Only a small percentage of responses recorded showed that executive management (7%) and "myself" (1%) are the responsible groups. The disparity alludes to a lack of employee engagement and confusion about levels of responsibility.

The results obtained is similar to Jackson (2021) which indicated that the frequent contradictory priorities of public healthcare institutions may create an environment that discourages employees taking ownership and being highly engaged when implementing change. The policies that govern the daily operations are seen as "rigid, regressive, rule bound and cumbersome" and bureaucracy in management activities are seen to limit staff from engaging and taking ownership of service quality improvement plans. Additionally, as significant

variables affecting the quality of care, fragmentation and a lack of coordination of public healthcare services were also identified by Malakoane, Heunis, Chikobvu, Kigozi and Kruger (2020), primarily as a result of poor leadership and leadership deficiencies.

The pattern matrix shown in Table 7.9 is significant when measuring perceptions on the team in the current work environment. The items that make up each of the constructs are provided along with the three components. Since the missing questions load onto many constructs, they have been eliminated.

Table 7.9: Pattern Matrix**:** Perception on the team and your current work environment

	Component		
	1	2	3
My team are committed to their jobs.	.874		
There is a strong sense of responsibility of all staff members.	.742		
My team and I are open to new idea and change.	.727		
I am proud to work at my workplace.	.700		
There is great teamwork within my department.	.694		
There is a strong sense of accountability of senior staff members.	.655		
There is a strong sense of ownership by all staff.	.621		
There is SUFFICIENT communication from upper management within the organisation		.873	
There is sufficient communication from upper management within my organisation		.854	
There is great teamwork throughout my organisation including all departments.		.547	
We have strong interdepartmental communication.			.872
We HAVE strong interdepartmental communication.			.872
There is sufficient communication at department level.			.494

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

Based on the item loading on each factor and the interpretation from the factor analysis, three components/factors were identified. Factor 1 loaded 7 variables and will be discussed under the theme "attitude towards team and teamwork." Factor 2 had the loading of 3 variables and will be discussed under the themes "Team Communication." Factor 3 had a loading of 3 variables which will be discussed under the theme "Interdepartmental communication." Statements that have been eliminated either had very low, insignificant factor loadings or loaded on more than one factor.

Attitude towards team and teamwork

With a factor loading of 0.874, it exposes that frontline employees perceive their team to be committed to their jobs and have a strong sense of responsibility (0.742) and pride (0.700) towards their jobs. While they are opened to new ideas and change (0.727), the team needs to work on accountability, ownership and teamwork as developmental areas as these items had lower factor loadings under this theme.

Team communication

The three variables that loaded under this factor indicated that there is sufficient communication from upper management which loaded twice (0.873 and 0.854). The reason that it loaded twice is because during the construction of the questionnaire, a negative response was provided to ensure reliability. When loading the factor analysis, the negative statements were changed to positive thus yielding the current results. The low factor loading of 0.547 reveals that interdepartmental teamwork needs to be addressed.

Interdepartmental communication

During questionnaire construction, one positive statement and one negative statement regarding the effectiveness of interdepartmental communication was presented to the respondents. When loading the factor analysis, the negative statement was converted to a positive statement and therefore strong interdepartmental communication loaded twice with a factor loading of 0.872. revealing that there is strong interdepartmental communication at the institutions. However, the factor loading of 0.494, allude to a situation of insufficient communication at department level flagging an area for improvement.

When evaluating the perceptions on organisational culture, the pattern matrix presented in Table 6.9 is of utmost importance. The two components are given with the items that makes

up each of the constructs. The questions that are missing have been discarded since they load onto more than one construct.

Table 7.10 Pattern Matrix: Organisational culture towards new plans

	Component	
	1	2
The organisational culture and supports an environment that can deliver high quality of service.	.833	
The resources required to implement service quality improvements are available.	.809	
There are key individuals within my organisation who are resistant to change.		.793
There is no incentive to implement service quality improvements plans.		.767

Extraction Method: Principal Component Analysis.
Rotation Method: Promax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

There were 7 statements presented in the questionnaire but only 4 loaded with significant factor loading under two components. Based on the item loading on each factor and the interpretation from the factor analysis, two components/factors were identified regarding the perceptions of organisational culture regarding the implementation of new plans for service quality improvement. The first and second factor loaded with 2 items each with significant factor loadings.

The results show that there is indeed a supportive organisational culture that is capable of high-quality service delivery with the highest factor loading of 0.833. However, with lower factor loadings, the results allude to a situation where although there is support, resources must be considered when making plans to improve service quality (0.809). There are also key individuals within the teams who are resistant to change (0.793) perhaps because there are no incentives offered (0.767) to implement plans related to service quality improvement.

It is believed that the ideas of employee involvement and incentive when putting plans into action will boost worker morale and dedication. According to findings from earlier studies, employees strongly appreciate incentive programmes and recognition initiatives as approaches to increase their level of involvement (Jackson, 2021).

When measuring perceptions of daily work activities, the pattern matrix presented in Table 6.10 is of high importance. The five components identified are given with the items that makes up each of the constructs. The questions that are missing have been discarded since they load onto more than one construct.

Table 7.11: Pattern Matrix: Work environment

	Component				
	1	2	3	4	5
The toilets at my workplace are NOT dirty.	.901				
I have access to clean toilets.	.856				
My workplace is clean	.828				
My workplace is NOT unhygienic and dirty.	.804				
I get adequate support from my team to conduct my daily duties		.887			
I get adequate support from my seniors to conduct my daily duties		.855			
I am satisfied with my job.		.689			
I have a place to eat my food during shift.			.896		
There is a place for me to rest during shift.			.680		
I have adequate time allocated for a break.			.628		
I have enough resources to complete my job efficiently.				.814	
I DO NOT lack the resources I require to complete my work efficiently.				.813	
My workload is too heavy.					.751
I perform many task that is not within my job description.					.738

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

Based on the item loading on each factor and the interpretation from the factor analysis, five components/factors were identified. Factor 1 loaded 4 variables and will be discussed under the theme “clean work environment.” Factor 2 had the loading of 3 variables and will be discussed under the themes “Support from team.” Factor 3 had a loading of 3 variables which will be discussed under the theme “Break time.” Factor 4 loaded 2 variables and will be discussed under the theme “Resources.” Factor 5 loaded 2 variables and will be discussed under

the theme “Workload.” Statements that have been eliminate either had very low, insignificant factor loadings or loaded on more than one factor.

Clean work environment

The pattern matrix loaded construct one with high factor loadings of between 0.804-0.901 for variables linked to a clean workspace. The toilets and the workplace seem to be clean. Clean work environments are important particularly in a hospital environment where cross infection is always a risk. The factor loadings are close in magnitude pointing to a high intra correlation in the group.

Support from team

The construct loaded three variables under this theme, indicating team (0.887) and senior (0.855) support. The magnitudes of these two factor loadings are close, indicating a high intra-group correlation. The fact that there is still low job satisfaction, as shown by a factor loading of.688, suggests that there may be other factors at play, and senior team members' and team members' lack of support is not one of them.

Break time

The three variables that loaded under this theme indicate that there is a place for the frontline employees to eat their meals and rest during their breaks. However, the time is insufficient. The variable regarding time loaded at .628 which is lower than the other variables in this theme. It might be connected to other problems, such as staffing shortages that prevent front-line workers from taking the time they require.

Resources

This factor loaded two statements which loaded extremely closely at 0.814 and 0.813. As shown in Table 6.10, they were two opposing statements regarding the availability of resources to complete daily tasks. Both loaded positively indicating that there is enough resources to complete daily tasks.

Workload

There were two factor loading under this theme which are very close in magnitude showing high intra relation. Both variables indicate that the workload is too heavy, and the frontline employees perform many tasks that is not within their job description. Due to the stressful

environment and heavy workloads, healthcare professionals who work long hours and see a lot of patients are more likely to face the danger of litigation. They are also more inclined to alter their professional behaviour and emotional responses when malpractice litigation is a possibility. It has been discovered that one of the incentives to deliver great service quality and remain in the profession longer is a manageable workload (Birkeland and Bogh, 2019).

Heavy workloads at work may impact on the ability of the frontline employee to perform well in other aspects of their life. Therefore, a question based on work-family life balance was posed in the questionnaire. The results are presented in the patter matrix table below in Table 7.18.

Table 7.18: Work-family life balance

	Component			
	1	2	3	4
My elderly family members have good care while I am at work.	.846			
My children have good care while I am at work.	.822			
I am able to stay with my children when they are sick.	.758			
I am able to maintain a balance between the needs of my family and my work.	.548			
The shift work impacts my life positively.		.963		
The shift DOES NOT work impacts my life negatively.		.940		
I am NOT exhausted when I get home, so I have no energy to partake in family activities after work.			.866	
I have energy to partake in family activities after work.			.737	
The leave allowances DOES meet my needs adequately.			.637	
The problems experienced by the healthcare sector cannot be repaired.				.688
I am NOT looking to leave the healthcare sector.				.687

I am proud of my job.	.661
I am proud of my contribution to my community.	.569

Extraction Method: Principal Component Analysis.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

When measuring perceptions of work family life balance, the pattern matrix presented in Table 6.11 is of high importance. The four components are listed with the items that make up each of the constructs. The questions that are missing have been discarded since they load onto more than one construct, or the factor loadings were insignificant.

Based on the item loading on each factor and the interpretation from the factor analysis, four components/factors were identified. Factor 1 loaded 4 variables and will be discussed under the theme "Family life." Factor 2 had the loading of 2 variables and will be discussed under the themes "Shift work." Factor 3 had a loading of 3 variables which will be discussed under the theme "Energy and leave allowances." Factor 4 had a loading of 4 variables which will be discussed under the theme "Impressions of work."

Family life

The factor loadings for this component indicate that high factor loading for elderly (0.846) and childcare (0.822) showing that the family of the respondents are taken care of while the frontline respondents are at work. The respondents also indicated that they are able to stay at home with their children when the children are sick. However, the factor loading of 0.548 reveal that the respondents are still not able to maintain a balance between the needs of the family and work. The reason for this requires investigation as work-family life balance is seen to improve QWL (Siziba, Lynette, Barnard and Antoni, 2023).

Shift work

With high factor loadings (0.963 and 0.940) of the two opposing statements loaded as variables under the theme of shift work, it highlights that the shift work is not the cause of the low work -family life balance cited in the previous theme of family life. The results clearly indicates that the shift work does not impact negatively on the life of the frontline healthcare workers.

Energy for home duties

There were three statements that loaded as variables under this factor which describes the energy levels of the frontline employees. The respondents indicated that they do have the energy to partake in family activities after work. The statement regarding leave allowances had a lower factor loading of 0.637 which indicates a point for improvement in leave allowance policies.

Impressions of work

Under this component, four variables loaded with distinctly lower factor loadings compared to the previous themes discussed for this pattern analysis presented in Table 7.19. The results indicate that the respondents believe that the problems experienced by the healthcare sector can be repaired. However, many of them are looking to leave the healthcare sector and cannot see the value of the work that they are doing for the communities that they serve therefore have lost their sense of pride as healthcare workers.

Table 7.19: Component matrix: Motivation

	Component 1
Recognition	.787
Promotion	.776
Salary increase	.768
Motivational talk	.707
Additional Leave	.702

Extraction Method: Principal Component Analysis.

a. 1 component extracted.

When assessing what motivates the frontline employees the most, only one component loaded scoring between 0.702-0.787. A list of five items were presented in the questionnaire and the respondents had to rate it according to “not important at all” to “extremely important.” Having a clear indication as to what motivates the frontline employees allows management to implement appropriate measures to improve productivity.

The factor loading are extremely close in magnitude showing high intra-correlation in the group. Recognition of work done in the form promotion enabling a salary increase indicate that that the respondents are willing to change their roles and look forward to upward movement to secure a salary increase and is consistent with findings from other studies that demonstrate how deeply motivated healthcare professionals are to help others and that their motivation comes from more intrinsic sources, such as gratitude, recognition, and a sense of accomplishment when a patient recovers, than from extrinsic sources like pay and motivational speeches (Siziba, et al., 2023).

Motivational talk and additional leave ranked lower than the first three, however still holds importance. The findings about additional leave are supported by Mosisa, Muktar, Adugna, and Bizuneh (2022), whose study on QWL on nurses in an Ethopian organisation reported similar needs regarding leave. Additionally, the study also cited other studies with similar results which took place in Saudi Arabia and Bangalore.

7.9 Discussion of Qualitative data and findings

Iterative processes such as qualitative data analysis necessitate frequent review and improvement. In order to find patterns, themes, and insights, a methodical and rigorous procedure of reviewing and evaluating the data was required. To facilitate analysis, the data from the questionnaires was transcribed onto an excel spreadsheet. Grounded theory was utilised to discover specific themes or constructs after the data had been coded. The responses were reviewed several times, underlining significant information that helped create codes. The outcomes from the qualitative section of the study follows.

7.9.1 Section A - Profile

Section A contained two questions designed to collect qualitative data. The purpose of the inquiries was to investigate the positive features of the work and the reasons behind leaving the prior position. Determining the job's perceived importance was crucial because it impacts employees' quality of life. Table 7.20 depicts the researcher’s thematic analysis of qualitative responses from Section A, Question 5 and Question 8 of the questionnaire.

Table 7.20: Qualitative questions in Section A

What are the best aspects of your current job?

Results:

Theme identified	Code	%
Work	WRK	56%
Relation and Co-Operation	RCO	12%
Training And Professional Development	TPD	7%
Favourable Working Environment	FWE	6%
Nothing	NON	4%
Autonomy Of Work	AOW	4%
Empathy, Healing, Gratitude, Family of Patients	OTH	4%
Compensation and Rewards	CAR	3%
Organisation Culture and Climate	OCC	3%
Work Life Balance	WLB	1%

(n=322)

Why did you leave your previous place of employment?

Results:

Theme identified	Code	%
First job. Just completed qualification	FJ	31%
Better opportunity/environment/salary	BP	19%
Reasons linked to home life	HM	15%
Career advancement	CA	14%
End of contract/retired	EC	9%
Self-development	SD	6%
Wanted to work in the public sector	PS	3%
Other	OT	3%

(n=286)

The purpose of the two questions analysed in Table 7.20, was to elicit the respondents' top priorities for what they considered to be the "best" aspects of a job and why they left their previous employment. Understanding why someone would choose to go to a new job versus why they would leave one could provide information into what the respondents perceive as

"better". Multiple responses were noted from some respondents and all responses were noted under the respective constructs.

It is evident that the actual work is appealing to the respondents. Out of the 322 responses received, 56% of the respondents cited “caring for or helping sick patients”, “providing a service”, “saving lives” as the best aspects of their “work.” There seems to be a love for what they do with dedication and commitment. The statements demonstrate that there is a deep feeling of love and respect for others. Table 7.21 collates responses from Section A, Question 5 based on the construct “work” coded as “WRK” as the best aspects of the job.

Table 7.21: Best aspect of the job: Work (WRK)

Statement	Respondent number
Being able to treat the under privileged population	*101*
Making a difference in patients' lives	*106*
Commitment to my patients	*136*
Giving back to the community	*139*
Helping those who are desperate for care and incapable of caring for themselves	*24*
To ensure that our patients are treated with courtesy, consideration and their basic needs are attended to and addressed	*47*
I am blessed to use my skills to heal young children and babies from illness	*306*
I love being a nurse	*84*
Provide relief to sick patients	*218*
Taking care of people’s health and fighting sicknesses together really warms my heart	*91*
To assist the mother with delivering the baby and to ensure that both mother and baby survive	*120*
The humility and gratitude of the patients we serve	*242*

The responses in Table 7.21 emphasise the roles that frontline workers play and the fact that goals like respondent 139's "giving back to the community" cannot be accomplished on their

own. Twelve percent of the 322 respondents said their everyday work life is influenced by the team they work with and was located under the "Relation and Cooperation" theme. The following responses in Table 7.22 provides examples of how relationships and teamwork impact frontline staff members' everyday lives.

Table 7.22: Best aspect of the job: Relation and co-operation (RCO)

Statement	Respondent number
Working as a team. Building a working environment that feels like it's a family place	55
Working with good doctors	56
Staff are agreeable and work as a team	29
Problem solving, communication, planning and organising of work	207
Working with paediatric specialists	208
Teamwork	168
Good team	258
Team dynamics	111

Only 4% of the respondents indicated that they have a favourable working environment, yet they left their previous job thinking this is a better opportunity (19%). For some (31%), this is their first job and 14% will leave for career advancement or personal development opportunities (6%) in search of training and professional development (7%). Others changed their job for reasons linked to their home-life (15%) citing reasons such as reasons related to homelife, compensation and rewards and work life balance.

Table 7:23: Reason for leaving previous employment (HM)

Statement	Respondent number
Residential relocation	53/127/173/190/200/218/230/237/238/ 280/282/287/97/302/311
Closer to home	284
I wanted to be with my children as they were staying alone	177

While 15% of the 322 respondents changed their jobs for reasons linked to their homelife, only 1% indicated that the best aspect of their job is the work-life balance. According to Hj et al., (2017) and Liaqat et al., (2018), workers who maintain a healthy work-life balance (WLB) are motivated and able to perform at their best at work. When employees cannot maintain their entire life space, their productivity at work suffers. Compensation and rewards featured as one of the least favourite aspects of the job (3%) but 19% of the respondents viewed this job as a "better opportunity". A minority enjoy making decisions (autonomy of work -4%) and enjoy the organisational culture and climate (3%) while 4% indicated that there is nothing that they liked about their job. During the Covid-19 pandemic, many frontline workers were employed on contract. Many saw the end of their contracts (9%) and therefore started the new job at their respective hospitals that they were interviewed at.

Results from research conducted by Hammig (2018) in Belgium and Switzerland showed that the inability of healthcare professionals to strike a balance between home and work life led to high levels of exhaustion and increased their intentions to leave. However, in the current study, it appears that the intention to leave is primarily motivated by feeling undercompensated for the effort put out at work. Reducing the physical demands and the emotional and mental strains of the job can boost the desire to stay in the field (Hammig, 2018).

The qualitative data from Section B will be examined in the next section.

7.9.2 Section B - Training and skills

Section B contained 3 questions that aimed to elicit qualitative information from the respondents. This section was intended to address Objective 1, where the researcher sought to investigate what frontline healthcare professionals anticipated following their participation in the healthcare quality management programme. Although not all training was related to management, it did address the issue of quality improvement. Table 7.24 is based on responses from Section B, Question 15 and 16.

Table 7.24: Qualitative questions for Section B

Which skills were improved during the training sessions attended

Results:

Theme identified	Code	%
Work skills	WS	35%
Communication	CM	15%
Management training	MN	13%
Computer skills	CS	12%
Confidence	CP	8%
Responsibility	RS	4%
Accountability	AC	4%
Stress management	SM	4%
Admin skill	AD	3%
Batho Pele	BP	2%

Multiple responses noted (n=289)

Which skills do you still need to improve on?

Results:

Theme identified	Code	%
Work skills	WS	38%
Management skills	MN	15%
Communication skills	CM	13%
Personal development	PD	14%
Computer skills	CS	6%
Admin skills	AD	5%
Stress management	SM	5%
Language	LN	4%

(n=220)

There were two questions that dealt with skills which aimed to identify any gaps in the type of training provided. For question 15, which related to which skill were improved during the training sessions attended, multiple responses were noted from the 289 respondents. For question 16 which asked which skills still need to be improved, 220 responses were counted.

The results showed that the training improved the work skills (WS) of 35% of the respondents. Below are some examples of qualitative statements from the respondents regarding improved work skills.

Table 7.25: Examples of improved work skills through training (WS)

Statement	Respondent number
Delivering babies	114/115
To give total nursing care in a critical environment/ICU	99/102
Improvement of patient care Infection control	93/94)

Table 7.25 highlights responses from Section B, Question 15. Three qualitative responses are recorded in Table 7.25 above under the theme of better work skills. There are more statements that indicated that the training was directly linked to the work performed by the frontline employees but listing them all would be laborious.

Other constructs that emerged include communication skills where 15% of the respondents stated their communication skills had improved, 13% stated that their management skills improved and 12% stated that their computer skills had improved after the training. Improving these skills have boosted their confidence (8%), increased their sense of responsibility (4%) and accountability (4%). Some respondents also indicated that they have learnt stress management skills (4%), administration skills (3%) and Batho Pele principals (2%)

The Batho Pele Principles are an important part of the public health sector's current knowledge potential in South Africa and serve as an important illustration of quality management systems in the field. According to the Batho Pele Principles, the South African public health sector, which is overseen by the Department of Health, embodies the following aspects of quality management:

1. Consultation - patients are made aware of their disease and illness and allowed to make decisions to the best of their ability with their consulting doctors.

2. Service standards - patients should be informed of what level or standard of care they can expect in a specific health facility and attend with a referral letter.
3. Access - patients should not be denied access to free and equitable healthcare.
4. Courtesy - all patients should be treated with respect, courtesy and dignity.
5. Information - it is ethically necessary to improve patient information and educate people about their health problems.
6. Openness and transparency - patients can exercise to witness the transparency regarding budgets and healthcare expenditure.
7. Redress - if patients receive a sub-optimal level of standard of care, the patient is entitled to re-assess the issue with the treating team and is subject to an apology and can lay complaints of medical negligence.
8. Value for money - All patients should receive healthcare in an economical and efficient manner in order to provide people with the best possible value for money.
9. Encouraging innovation and rewarding excellence - Rewarding healthcare employees that go the extra mile in making the difference in patients' lives.
10. Customer impact - focusing on internal and external customer satisfaction is a core element of Batho Pele and more efforts are required to create better channels to communicate satisfaction or dissatisfaction from all stakeholders.
11. Leadership and strategic direction - good leadership is one of the most essential components for effective healthcare facilities.

In order to achieve important components of quality management systems, The Batho Pele Principles have established historically significant goals for the public healthcare industry. To properly apply this in light of the local healthcare trends' shifting dynamics, this needs to be revitalised and assessed. The crucial component of monitoring and evaluating healthcare facilities and programmes is deeply ingrained in healthcare quality management systems.

Although several skills mentioned in Table 7.25 were improved, there is still a need for improvement of skills. Thirty eight percent of the respondents still require additional training to improve skills that are directly associated with their work. Table 7.26 lists some courses that was mentioned by the respondent in Section B, Question 16.

Table 7.26: Examples of course requirements to improve work skills (WS)

Statement	Respondent number
Advanced mid wifery	136
Analysing influences	73
Protocols and unit guidelines	43
Critical care nursing	55/58/62
Episiotomy. I need to further my knowledge to an advanced level	115
HVV Dialysis	269
Professional Nursing	297
ICU Nursing skills	99/276
Ultrasound guided procedures	22
More oscillator training required	82
More ventilator training	83
Neonatal resuscitation	12/284/287/289

Although the need for work skills (WS) enhancement ranked high (38%), there were other themes that suggested that there is ambition to move up the ladder where 15% of the respondents called for courses to improve their management skills, 13% wish to improve their communication skills and 14% asked for courses in personal development. Adaptability, accountability, goal setting, time management and critical thinking were some personal development key words that were used to create the theme "personal development". Respondents also want to improve their computer skills (6%), administration skills (5%) and stress management skills (5%). These last three themes mentioned were also courses that were offered. It might be safe to assume that not all respondents attended the training, leaving a training gap. Zulu was the local language at one of the hospitals visited, therefore 4% of the respondents requested to learn the language to make communication with patients easier.

Similar demands were noted in a recent study conducted in India, where the importance of speaking the patient's native language was highlighted. The outcome was intriguing as it demonstrated the need for professional nurses to be multilingual due to globalization and migration. They require sufficient language skills in addition to cultural competency and the capacity to provide care that is culturally appropriate. Incorporating language teaching into the

nursing curriculum may increase patient compliance by assisting nurses and patients in feeling more at ease with one another (Larsen, Mangrio, Persson, 2021).

The next section will link QWL with training. The respondents who attended training were asked how the training improved their QWL. Table 7.27 lists the results from Section B, Question 21.a which required the respondents to first answer "YES", and if yes, elaborate.

Objective 3 was addressed to determine how the training impacted on the QWL of the respondents. Multiple responses were noted as the respondents mentions aspects of improvement even though part of their QWL were improved. Two hundred and sixteen responses were recorded stating that the training did improve the QWL, and 229 responses were received regarding how to improve the training so that QWL is improved. The responses were coded and separated into themes as shown in Table 7.27.

Table 7.27: Training and QWL

Has the training enhanced your QWL?

Results from YES responses

Theme identified	Code	%
Increase capability to do work better due skill improvement	IC	26%
Better service delivery	SD	23%
Personal development (accountability/commitment/empathy, Confidence)	PD	11%
Better communication skills	BC	11%
Confidence	CF	8%
Better understanding of my role	BU	8%
Better work relationships	BR	7%
Better stress management	BS	4%
Decreased errors	DE	1%
Job satisfaction	JS	1%

Multiple responses noted

(N=342)

(n=226)

Due to the qualitative nature of the question, multiple responses were noted in this study. The training increased the capability of the respondents to do their work better due to skills improvement (26%) and assisted with better service delivery (23%). Some respondents also indicated an improvement in their communication skills (11%). Another theme that was prevalent is personal development. Respondents who mentioned increased confidence levels, higher commitment levels, deeper empathy and better accountability showed high levels of personal development (11%) due to the training.

Other constructs that emerged was 8% of the respondents had a better understanding of their role and 7% built better work relationships. A small percentage indicated that they could manage stress better (4%) and reduce errors (1%). Only 1% indicated a higher job satisfaction level after the training. Table 7.21 records some of the qualitative responses from the population who experienced a higher QWL after attending training. The qualitative responses displayed in Table 7.28 are from Section B, Question 21.a.

Table 7.28: Increased QWL due to training

Statement	Code	Respondent number
Better communication skills makes my work easier	BC	200
I am more slightly more confident when caring for my patients	CF	3
I give better patient care, better patient relationship and better Dr to Dr relationships	SD/BR	23
I am aware of how to solve certain problems regarding patient care, but I want to learn about how to deal with difficult colleagues	BS/BR	4
I have the ability to handle workplace admin more efficiently	IC	15
I now have the self-confidence to ask second opinion where I do not understand. I think these kinds of workshops enlighten us on work ethics for inexperienced staff and helps us gain self-confidence	CF/BR	27
Improved digital skills helps with efficiency in record keeping which means I can knock off on time=good resting time	BC	54

More training helps us build confidence and empowers us to do our work properly. Also, we are committed to our work. We won't leave if we can get training	CF/IC	59
Able to manage stress and be able to communicate effectively	BS/BC	68
It made me more flexible and willing to nurse patients of all different calibre. Improved my knowledge and confidence	IC/CF/SD	95
I work as a shift leader in the medical ward, so communication, confidence and accountability are important. I learnt this during my training	BC/PD	147
Now, I can put myself in the position of the parent/guardian, when they are under stress because of their beloved children. I can communicate better with them and understand them	PD/IC/BC	155

Similar results were shown in another study in SA where oncology doctors were surveyed. The need for increased training facilities across institutions to support career advancement was emphasised by those who were driven by specialised training possibilities and positions. The chance to grow in their occupations and to upgrade their skills and knowledge is precisely what drove the respondents of the study (Siziba and Barnard, 2023). Additionally, respondents are probably striving to advance in their careers because results from a study on nurses in Chile show that the higher the seniority and education level, the higher the QWL. In the study, the QWL of the head nurse was reported to be three times better than that of the lower-level nurses (Parra-Giordano, Quijada Sánchez, Grau Mascayano, Pinto-Galleguillos, 2022).

The higher quality of work life, the higher job satisfaction is experienced. Therefore, in an effort to increase job satisfaction, training is sometimes used as a tool for improving QWL (Parra-Giordano et al., 2022). For employees to feel satisfied at work, an ideal organisational culture must be cultivated through enhancing employee abilities and professionalism thus enabling maximum job satisfaction improvements and boost productivity outcomes (Sinaga, Iskadarini and Wibowo, 2022). There were respondents who answered "NO" to question from Section B, Question 21.b. The results are tabled in Table 7.29.

Table 7.29: QWL and training

Reasons that the training did not enhance your QWL

Results from NO responses

Theme identified	Code	%
Career advancement	CA	41%
Continuous training/Refresher Course	CT	20%
Personal development/Time/Stress/accountability	PD	15%
Computer/digital skills	CS	11%
Communication skills/Language	CM	9%
Administration	AD	4%

Multiple responses noted

(N=229)

(n=232)

Table 7.29 indicates there were 229 respondents who did not experience a higher QWL after the training and there were 232 responses (some respondents made multiple suggestions) with recommendations for additional courses that will aid their career advancement (41%). Subsequently, these results correlate with the quantitative results from question 16 and the results are presented in Table 7.26. Respondents require refresher courses (20%) to enable continuous skills improvement and 15% showed an interest in personal development courses, courses that enhance computer/digital skills (11%), communication skill and language skills (9%) and administration (4%). Similar statistics were recorded in the quantitative results presented in Table 7.26. Additionally, respondents provided the names of the courses that they require in the qualitative responses. The names of the courses are provided as recommendations in section 8.4.1. The courses requested are practical in nature which enhance job hard skills, rather than more intangible soft skills.

7.9.3 Section C - Quality of work life

There were 2 questions in this section that sought to extract qualitative data from the respondents. First, it was important to establish which challenges were experienced by the frontline healthcare workers which was derived from the secondary research. A list of 15 challenges were presented in the questionnaire and respondents had to indicate how the challenge affected their QWL and ability to provide high quality of service delivery. Some respondents indicated that they encounter multiple challenges and qualitative data showed that different groups experience the challenges differently. Qualitative techniques of coding were

employed to create themes. A thematic analysis of the data received based on the types of challenges will be presented. Some respondents indicated that they experienced the challenge, but they did not elaborate. Others provided multiple responses which were recorded accordingly.

Table 7.30: The challenge of lengthy waiting times

How the challenge of lengthy waiting times affect service delivery and QWL.

Results:

Theme identified	Code	%
Frustrated and tired/exhausted	FR	32%
Staff shortage	SS	20%
Delays treatment/increase length of stay	DL	11%
Difficult to ensure quality service delivery	DS	10%
High numbers of patients	HN	6%
Hi-higher risk of infection/complications	HI	5%
Abuse	AB	4%
Resource shortage	RS	4%
Death of patient	DT	3%
Increase in litigation	IL	2%
Waiting for training	TR	2%
Increase in complaints	IC	1%

(N=175)

(n=114)

Responses from Section C, Question 30.a are tabled above in Table 7.30. A total of 54% (175) of the total population indicated that they do experience lengthy waiting times as a challenge. While some respondents only indicated “yes” and chose not to elaborate, there were other respondents who contributed multiple responses which were broken down into themes. There were 114 responses recorded and the most prevalent themes identified are depicted in Table 7.30. Frustration caused by exhaustion (32%) was not only obvious from the employees but also from the patients who abuse (4%) the employees. Some of the reasons for lengthy waiting periods are shown to be interlinked with other problems showing a cascading or overflow effect

as one problem leads to another. Staff shortages (20%) and resource shortages (4%) results in delays on treatment for patients and a longer hospital stay (11%). It makes ensuring high quality of service extremely difficult (10%) as there are high numbers of patients (6%) which increase the risk of cross infections and complications (5%). In some cases, death of the patient is recorded (3%) leading to increased complaints (1%) and increase in litigation (2%). Two percent of the 114 responses recorded indicate that there is also a lengthy waiting period in terms of availability of training opportunities for employees. Below are some statement from respondents from Section C, Question 30.a.

Table 7.31: The challenge of lengthy waiting times - Responses

Statement	Code	Respondent number
Frustrating patients creates hostility towards staff	FR/AB	310
Lengthy waiting time for delivery of linen which create dysfunction in the ward	DS	159
Lengthy waiting time to very sick patients is affecting the lives of patients very strongly and to some extent life damaging	HI	26
Lengthy waiting times is frustrating for both the staff and the patient. It has a negative impact on service delivery and QWL	FR	133
Patients wait a long time to get help, sometimes, it is too late. It really makes us feel helpless when they die waiting for help which could have been prevent with quick treatment	DL/DT/DS	272
Post basic training on hold for approximately 3 years	TR	28
There are too many vacant posts. There is a high rate of absenteeism which makes our workload heavier on those days	SS	262
We have to wait for a long time for training. I have not been trained in 3 years	TR	257
Irate patients, overworked and frustrated staff	FR/AB	261
Patients end up complaining. Unhappy and hungry	IC	19
We sometime lose patients awaiting hi-care beds	DT	51
Increased workload for staff. Leads to increased litigation as some work is not done	IL/FR/DS	203

Table 7.31 provides insight on how the frontline employees experience lengthy waiting times. While some are waiting for training, others are waiting for resources such as linen for the wards. The scenarios displayed above is a clear indication that service delivery is seriously hampered.

Long wait times have an impact on the healthcare institutions both inside and outside. Internal waiting times can also relate to the length of time between placing an order and receiving the medical supplies. The organisation's performance externally is impacted by this. Additionally, a staffing shortfall lengthens patient wait times, which is frustrating. In China and Germany, Huang, Zhang, and Liu (2020) discovered a connection between aggression and a heavy workload among public healthcare professionals. The origins of violence cited were also either internal (hostility amongst employees and supervisors) or external (hostility from patients and visitors toward employees). It has been discovered that factors like extended wait times and a lack of doctor availability are substantially connected with workload among healthcare employees and low quality of service delivery.

Staff shortages was seen to be interlinked and the foundation of many of the challenges experienced. Table 7.32 highlights the thematic analysis of this challenge as perceived by the respondents. Multiple responses were noted from Section C, Question 30.b.

Table 7.32: The challenge of staff shortages

How the challenge of staff shortages affect service delivery and QWL

Results:

Theme identified	Code	%
Heavy workload/Overworked	HW	45%
Burnout/Exhaustion	BO	15%
Poor service delivery	SD	14%
Compromised patient care	CP	11%
Time constraints, lengthy waiting time	TC	8%
Frustration	FR	4%
Absenteeism	AB	3%

Multiple responses were noted

(N=291)

(n=331)

A total of 291 respondents indicated that they are short staffed meaning that there was agreement amongst 90% of the respondents and some respondents gave multiple qualitative responses. There were 331 responses for this question and 45% of the responses indicated that the shortage of staff led to high workloads and overworked employees (HW) leading to burnout and exhaustion (15%) and absenteeism (3%). When the department is already short staffed and an employee calls in sick, it leads to a compromised system which leads to poor service delivery (14%) and compromised patient care (11%). Patients must wait longer for treatment (8%) leading to a feeling of frustration and helplessness amongst both staff and patients.

The results can be seen as not surprising, as other studies reported similar results. Due to the high temporal, physical, emotional, and mental workloads and significant job stresses that are strongly and positively associated with burnout symptoms and thoughts of leaving the profession, one in twelve healthcare workers in Switzerland showed increased burnout symptoms, and one in six thought frequently about leaving the profession (Hammig, 2018). One of the significant work stressors was identified as reward frustration or gratification crises at work. Frustration of being understaffed can lead to abuse and violence amongst healthcare workers are linked to burnout and depression (Huang et al, 2020).

Hamming (2018) elaborated on how temporal, physical, emotional, and mental workloads impact on the risk of burnout. Temporal workloads were described as higher workloads for a short period of time due to unforeseen circumstances such as absenteeism. Examples of physical, emotional and mental workloads can be recognised as longer working hours, higher numbers of patients seen during a typical working day and not being able to help everyone due to a lack of resources. These are seen as significant contributors to the workplace stressors and increase the chances of burnout. Table 7.33. demonstrates the results shown from Section C, Question 30.b.

Table 7.33: The challenge of staff shortages-Responses

Statement	Code	Respondent number
Can result in patients going home without getting any help. Gives too much pressure on staff	CP/FR	89
Drained emotionally. Work overload	FR/HW	209

Due to shortage of staff, we are unable to attend to all the people that need help	CP	248
Fighting with absenteeism. Burnout. Tired	AB/BO	19
I often have to do two people's work, not getting to do my work. Exhausted having to multitask	HW/BO/SD	30
Many patients don't obtain the care required. Patients lost their lives. Unable to deliver high quality nursing care. Worked under stressful conditions	CP/SD/FR	93
Increased workload leading to burnout and frustration	HW/BO/FR	98
Lost staff are not replaced	HW	184
Not all patients are seen on that day and the workload is increased. One cannot take leave	CP/SD/FR	206
Ratio of staff to patient is low which impairs patient care	CP/SD	300
There is 1 registered nurse, 1 EN and at times 4 ENA's for 60 patients	HW/SD	166
We feel helpless because we cannot give patient care that they deserve. It is beyond our control	FR/SD/CP	271

Table 7.33 provides insight on how the frontline employees experience the challenge of being short staffed. There appears to be an overall feeling of helplessness and frustration and loud appeals for assistance in this regard. The scenarios displayed above is a clear indication that service delivery is seriously hampered due the themes shown in Table 7.33. Staff are an integral part of the service delivered and service delivery is impossible without the staff.

The next challenge was poor hygiene. Secondary research showed that this challenge was prevalent because of other challenges. The key issues were a lack of physical infrastructure, substandard facilities, a lack of a dedicated budget for facilities maintenance, and inappropriate facility use. Additionally, a lack of resources such as running water, sanitation and handwashing facilities as well as the lack of physical infrastructure, poor quality of facilities, lack of separate budget to maintain facilities, and inappropriate utilisation of facilities were the main problems cited by Berihun, Adane, Walle, Abebe, Alemnew and Natnael (2022).

The thematic analysis from responses in Section C, Question 30.c will provide insight on how the frontline employees perceive the challenge of poor hygiene.

Table 7.34: The challenge of poor hygiene

How the challenge of poor hygiene affects service delivery and QWL		
Results:		
Theme identified	Code	%
High cross infection rates	HI	38%
Lack of resources/Mismanagement	LR	13%
Feel unsafe	US	13%
Overcrowding/long waiting time	OC	9%
Staff shortage as staff get sick	SS	9%
Compromised patient safety	CP	7%
More cleaners needed	MC	7%
Bad reputation	BR	4%
		(N=231)
		(n=54)

There were 231 (72%) of respondents who indicated that they experience the issue of poor hygiene. Only 54 respondents elaborated on their perceptions and indicated that there are high cross infection rates (38%) due to the lack of or mismanagement of resources (13%). The respondents feel unsafe (13%). The challenge is exasperated by overcrowded conditions (9%) and staff shortages (9%) leading to long waiting times and compromised patient safety (7%). The staff shortage also includes a shortage of cleaners.

Poor hygiene is a global challenge. WHO released alarming statistics regarding hygiene and indicated that where patients receive care and at restrooms in healthcare facilities, basic hygiene services like water, soap, or alcohol-based hand cleaners are absent in half of all health care facilities globally, with facilities in sub-Saharan Africa being the worst affected. In the region as a whole, 73% of healthcare institutions provide alcohol-based hand rub or water and soap at sites of care, but just 37% of restrooms have handwashing stations with water and soap. Compared to 68% of other healthcare institutions, hospitals are far more likely (87%) to have hand hygiene facilities at points of treatment. Only 53% of healthcare institutions in the least

developed countries have access to a protected onsite water supply. For comparison, the proportion for eastern and south-eastern Asia is 90%, with hospitals performing better than smaller healthcare facilities (88% vs. 77%). Worldwide, 11% of rural and 3% of urban healthcare institutions lacked access to water. One out of every ten health care institutions worldwide lacked sanitation services in the data-available countries. Between 3% in Latin America and the Caribbean, as well as eastern and south-eastern Asia, and 22% in sub-Saharan Africa, there were health care facilities without sanitation services. Only one in five (21%) of the healthcare facilities in the least developed nations provided simple sanitation services. The research also exposes that a lot of healthcare facilities do not do basic environmental cleaning or safely separate and dispose of medical waste.

Malakoane et al., (2020) cited that chronic underfunding of public health has negatively influenced the ability of existing health systems in African countries to respond to healthcare needs and provide unclean facilities. Without increasing investment in fundamental infrastructure, such as safe water, hygienic restrooms, and properly managed medical waste, it is impossible to ensure hygiene in healthcare institutions (WHO, 2022). Table 7.28 provides qualitative responses from Section C, Question 30.c based on how the challenge is experienced in SA.

Table 7.35: The challenge of poor hygiene-Responses

Statement	Code	Respondent number
More cleaners need to be employed or the current cleaners need to step up. We have dirty floors dirty, and bins not taken out timeously	MC	263
The toilets are not cleaned as regularly as it should. Working area is filthy as well	BR/US	32
Poor quality care. Patient's wellbeing are being compromised	CP	52
The cleaners need to step up. Poor service-floors dirty, bins not taken out timeously	MC/CP	62
Results in re-admission	OC	85
Feel less safe. Stress about taking home infections	US/HI	107

We are rushing around due to shortage of staff. Sometimes hygiene standards are compromised due to staff and resource shortage	SS/LR/CP	114
Causes staff shortage because the staff get sick due to poor hygiene then they don't come to work putting pressure on the rest of us	SS/BR	117
Due shortage of resources	LR	122
Because of overcrowding	OC	162
Bad reputation and an unaccommodating environment	BR	225
Faeces on the floor, patients left in soiled beds due to linen shortage. Not the best environment to work in	US	240
There is a huge risk of infection. I cannot use most of the bathrooms at work	HI	241

From the responses above, service delivery is compromised and extremely difficult. In some cases, the bad reputation may lead to employees losing their sense of pride towards their jobs. One of the main reasons for poor hygiene standard is poor infection control measures. Table 7.29 provides the thematic analysis of the qualitative results based on poor infection control measures.

Table 7.36: The challenge of poor infection control measures

How the challenge of poor infection control affects service delivery and QWL

Results:

Theme identified	Code	%
High infection rates	HI	42%
Low quality standards	LQ	28%
Lack of resources	LR	14%
Staffing issues	SS	8%
Overcrowding	OC	8%

Multiple responses noted

(N=224)

(n=98)

The total of 224 respondents indicated that they experience the challenge of poor infection control measures. Only 98 respondents elaborated on how they perceive the challenges giving multiple responses resulting in 114 responses.

There were five prevalent themes that were identified. The responses were coded and analysed as depicted in Table 7.29. The results show that there are high infection rates (42%) and low-quality standards (28%). Three main reasons were cited to be the cause of this challenge which is a lack of resources (14%), staffing issues (8%) and overcrowding (8%). Some of the responses are listed in Table 7.30 which will provide more insight into how this challenge is perceived based on responses from Section C, Question 30.d.

Table 7.37: The challenge of poor infection control measures-Responses

Statement	Code	Respondent number
Limited resources to administer and monitor infection control	LR/LQ	8
Some containers are not available, and we are sometimes unable to administer IV meds	LR/LQ	10
Poor infection control is just letting the fundamental nursing standards down - Irresponsible behaviour	HI/LQ	26
Poor quality care. Patient's wellbeing are being compromised	LQ	52
Many staff were infected with Covid-19. Experienced a decrease in QWL due to prolonged illness and post Covid infections	SS	93
Due to shortage of resources. We have to wait long for supplies	LR	95
This means a longer stay for patients in hospital and there is always a risk of the infection spreading	OC/HI	99
Extends and exaggerates the condition of the illness. I risk my own life too as I might catch the infection	HI/LQ	133
As it is directly related to patient care. We are unable to fully administer care	LQ	156
This is because there are more patients that beds resulting in overcrowding	OC	199
Vaginal swabbing equipment are not available. We cannot do vaginal swab resulting in slow care	LR/LQ	200

Staff get sick often leading to absenteeism and staff shortage	SS	217
This can lead to the spread of infections and death of innocent staff, family and patients	HI	300

Poor infections control leads to poor quality care, or it can be a result of poor-quality care where the patient's wellbeing is compromised. Additionally, staff wellbeing is also compromised as the staff get sick often leading to absenteeism. When a staff member is absent, it places more pressure on the staff who are at work. They experience time constraints and exhaustion. Staff are also scared of infecting their loved ones at home. The staff to patient ratio is very low causing the staff member to skip some steps in hygiene as they are rushing to help the next patient leading to cross infection. There is also a shortage of resources that inhibit processes that are required to ensure hygienic conditions are maintained. From this it appears that there is a strain on service delivery process due to a lack of resources and overcrowding which is exasperated by high infection rates leading to patients spending a longer time in the hospital. Other patients awaiting treatment will have to wait. Below are qualitative responses from Section C, Question 30.e

Table 7.38: The challenge of shortage of resources

How the challenge of shortage of resources affects service delivery and QWL

Results:

Theme identified	Code	%
Compromised patient care	CP	23%
Service delivery challenges (delay/unable)	SD	22%
Unable to complete important tasks	UC	21%
Poor job performance	PJ	14%
Daily challenge	DC	10%
Long waiting period for patients and orders	LW	10%

(N=230)

(n=185)

A total of 230 respondents (71%) indicated that they experience a shortage of resources at their workplace. Only 185 chose to elaborate on their response. The responses were coded under themes as shown above in Table 7.38. The results show that the shortage of resources are a daily challenge (10%) making it difficult to perform tasks, thus impacting on service delivery

(22%). Compromised patient care (23%) results from having to do without important equipment or having to borrow from other departments. Staff are frustrated and stressed out as they put orders through to procurement and wait a long time to receive stock (10%), further resulting in delays in the treatment for the patients. Table 7.39 sheds light on how the respondents perceive this problem based on the responses from Section C, Question 30.e.

Table 7.39: The challenge of shortage of resources-Responses

Statement	Code	Respondent number
More difficult and sometimes unable to perform procedures	SD/UC	1
Equipment is always out of stock	LW/DC	2
I am unable to complete some of my tasks and this makes me feel useless	UC	3
Compromised patients care leading to dissatisfaction with QWL	CP/PJ	5
We have to share resources making patient care restrictive	PJ	7
Making unsafe alternative plans	PJ	25
Cannot fully deliver service if resources is short. Not enough medication for all patients	SD/CP	73
Medication not available. Prolonged stay for patients. Unable to treat patients in a short time therefore patients remain ill longer	SD/CP	93
Unable to perform procedures as per protocol. Frustration due to lack of resources	UC/PJ	94
Enable to carry out important task at times e.g., Insertion of NGT due to no stock	UC/LW	96
Stock shortage at time or sometime even out of stock. E.g., IVAC sets- we are unable to change it every 72 hours. Infection control measures are compromised. Longer patient stay needing more resources	LW/CP	101
Most of our equipment are broken. We are awaiting budget	DC	120

Table 7.39 presents statements from the responses in question 30e which indicates evidence that employees are unable to complete important tasks which compromised patient care which has an impact on the service delivery levels and leaves staff feeling helpless if they do not have the resources that they require to complete their tasks effectively.

Table 7.40: The challenge of poor record keeping

How the challenge of poor record keeping affects service delivery and QWL

Results:

Theme identified	Code	%
Consistency	IC	29%
Duplication	DP	17%
Lack of resources	LR	13%
Increase workload	IW	12%
Service delivery	SD	9%
Incomplete documentation	ID	6%
Skills	SK	4%
Handover	HD	3%
Paperless	PL	2%
Absconding patients	AB	1%
Increased Litigation	LT	4%

(N=117)

(n=94)

A thematic analysis of the responses from Section C, Question 30.f is shown above in Table 7.40. A total of 117 respondents (36%) indicated that they experience challenges related to poor record keeping at their workplace. Only 94 respondents elaborated by giving their views on this challenge. The responses were coded under themes as shown above in Table 7.33. The thematic analysis reveals that challenges associated with poor record keeping has a cascading effect and impacts on the daily operations of the departments. The prevalent theme was consistency (29%). Some records are incomplete and problems such as lack of resources (13%) for e.g., stationery is not available leading to duplication of diagnostic tests (17%) and increased workload for the employees (12%). There is also a lack of skills (4%) as incomplete documentation (6%) was also reported. A proper handover is difficult with no or little records making it easier for patients to abscond (1%). Absconding patients attracts litigation (4%) making workload heavier (12%) as reports must be written. One response suggested that it might be useful to keep records to avoid litigation. Furthermore, it is challenging to get files as files frequently get lost and to track misidentification when resources such as identity bands are short. With no computer system and no stationery, manual procedures are not only labour

intensive and time consuming but also extremely complicated. Table 6.26 provides insight on the qualitative responses received.

Table 7.41: The challenges associate with poor record keeping-Responses

Statement	Code	Respondent number
All is done on the computer. We are paperless. But if all the patient information is not captured, we have to redo tests	PL/ID/DP	40
No computers. Manual recording keeping. Files always lost leading to repeating of tests thus wasting already scarce resources	LR/DP/IC	240
Due to staff shortage, we sometimes don't have the time to record	ID	134
Inconsistencies are very hard to track	IC	269
We need a digital admin system to log in patients, this will help a lot. At the moment, everything is paper based, and records get lost	LR/IC	281
Some records go missing which means that we have to start afresh with patient. Redo tests etc. This means wasting of resources and extended treatment time for patients	IC/DP/SD	173
No stationery	LR	192
We use pieces of paper. We must use one big chart	LR	161
Poor record keeping leads to litigation and if you have good records, it can bail you out	LT	203

Statements presented in Table 7.41 show results from different hospitals. One hospital operates on a digital platform where all records are kept on the computer, and everything is paperless. The hospital still noted difficulties due to a lack of computer skills, staff shortages and time constraints. The other hospital kept records manually but frequently loses files making retesting necessary thus wasting time and resources. There is also no stationery, making record keeping and handover very difficult which has a negative impact on the service delivery levels and compromises patient care.

Table 7.42: The challenge of adverse events

How the challenge of adverse events affects service delivery and QWL		
Results:		
Theme identified	Code	%
Absconding patients	AB	20%
Compromised patient care	CP	20%
Guilt and inadequacy/stress/low QWL	GA	20%
Increase litigation	IL	18%
Increased workload	IW	13%
Loss of resources	LR	9%
		(N=243)
		(n=44)

Based on athematic analysis of qualitative responses from Section C, Question 30.g, Table 7.42 above displays that a total of 243 respondents (75%) indicated that they experience challenges such as adverse events. Only 44 respondents elaborated by giving their views on this challenge. The responses were coded under themes as shown above in Table 7.42. The major themes highlighted by the respondents is absconding patients (20%) and compromised patient care leading to guilt and feelings of inadequacy, stress and low QWL (20%). Results showed increased litigation (18%) leading to increased workload (13%) and loss of resources (9%). Table 7.43 provides insight on the qualitative responses received under the relevant themes.

Table 7.43: The challenge of adverse events-Responses

Statement	Code	Respondent number
Absconding of patients	AB	159
No trust from patients as we are unable to provide sufficient patient care because of short of staff and resources	CP	10
Leaves a feeling of guilt and inadequacy	GA	22

We are living in difficult times. It is sometimes difficult to get to work. e.g., looting	GA	52
We have high incidents of patients running away. This leads to us having to write reports. More work to do	IW/AB	246
High numbers of absconded patients reflects negatively on the ward's statistics. High workload to fill in reports	IW/AB	249
Organisation loses money when money could have been spent on material and human resources	LR	300
Always a risk of the patient suing us and a lawsuit against us	IL	208

The qualitative statements presented above in Table 7.43 reveal that patients abscond from treatment and this could possibly be because of a loss of trust in the healthcare system. Staff must then write reports which increase the workloads. When the hospital is sued, money is lost which could have been used for valuable resources. Ideally, the adverse conditions must be avoided by ensuring that all protocols are followed. For example, to avoid absconding patients could sign a refusal of hospital treatment (RHT) form. In an ideal situation, obtaining the RHT is simple, however when a patient refuses to give consent to hospital, it can pose a dilemma for clinicians. While patients have a right to medical healthcare, they also have the right to decline, and clinicians cannot undermine their patient's trust and violate their rights to physical integrity.

However, there are instances when this can be overridden:

- When a patient does not have the capacity to make the decision
- When there is mental impairment which leads to compromised decisional capacity
- Lack of maturity.

These instances have been clearly defined in the hospital's procedures, but the high frequency of instances has led to the need to determine how to deal with clinical refusal of hospital treatment (RHT). Firstly, the process of obtaining consent needs to be looked at, as it should not be just a signature on the form but a full consultation, as everyone has the right to be given full and accurate information about the diagnosis and any proposed treatments and procedures. The cost must also be explained.

A study conducted by Nzaumvila, Mabuza, Mogotsi,Bongongo and Saidiya (2021), identified the following characteristics of refusal of hospital treatment:

- Day of the week
- Time of day
- Department where treatment is received
- Type of diagnosis
- Admission history into the hospital
- Person signing the RHT
- Previous RHT
- Consultation before and after RHT
- Existence of chronic disease

In many cases, a person may refuse treatment for reasons cited below:

- Family reasons
- Going to private hospital
- Going to consult a sangoma (traditional healer)
- No improvement in condition
- Not documented
- Personal reasons
- Second opinion
- Trust issue
- Unhappy with treatment
- Work related (Nzaumvila, et al, 2021).

Having the resources available to follow protocol can ensure high quality service delivery which can avoid litigation. Table 7.37 collates responses from Section C, Question 30.h.

Table 7.44: The challenge of increased litigation because of avoidable errors

How the challenge of increased litigation because of avoidable errors affects service delivery and QWL		
Results:		
Theme identified	Code	%
Work life challenges	WL	27%

Staff shortage	SS	26%
Loss of resources	LR	20%
Skills challenges	SK	9%
Resources	RS	9%
Increased workload	IW	6%
Poor record keeping	PR	3%

(N=249)

(n=34)

A total of 249 respondents (77%) indicated that there is increased litigation because of avoidable error. Only 34 responses were recorded that elaborated on their perceptions of the challenge. A thematic analysis is presented in Table 7.44. The prevalence of themes that are interlinked with other challenges and increased litigation is a resultant challenge. Staff (26%) and resource (9%) shortage as well as poor record keeping can make work life very challenging (27%). Challenges with skills (9%) makes the workload heavy (6%) for those who possess the skills required to complete tasks. The institution wastes money (20%) on litigation, rather than using it to acquire resources. Table 7.45 sheds light on how the challenge is perceived to impact on QWL and service delivery based on the qualitative responses from Section C, Question 30.h.

Table 7.45: The challenge of increased litigation because of avoidable errors-Responses

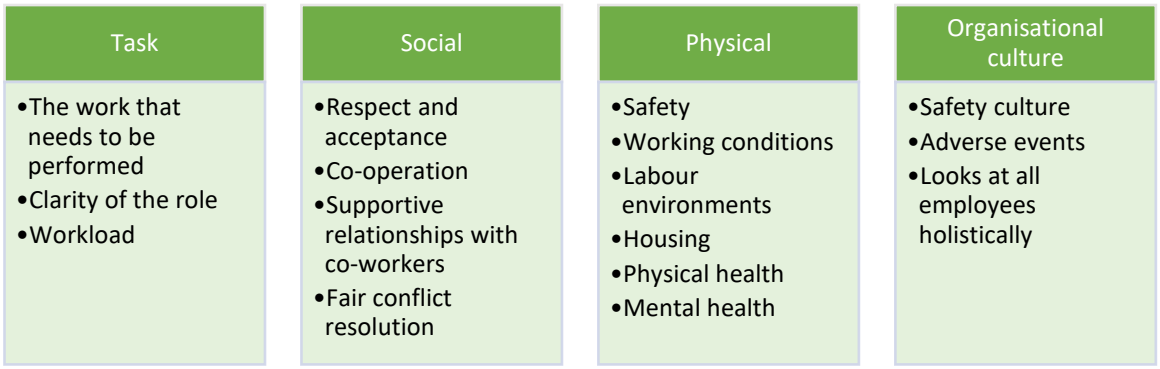
Statement	Code	Respondent number
Staff members work outside the scope of their work and have to take responsibility for the mistakes of others	SK/IW	10
Causes lack of motivation in the workplace. We also have a fear of losing our jobs	WL	117
Gives the impression that you are untrustworthy, and you lose interest in your job	WL	133
Time consuming while investigation takes place. Bad reputation for the organisation	WL	198
Increases litigation due to poor record keeping	PR	52
Shortage of wards and shortage of staff	SS/RS	244

Because all the money will be used for litigation not for patient care and staff development	LR	245

From the statements extracted from the qualitative responses presented in Table 7.45 litigation-related procedures are not only costly, but also time-consuming and there appears to be a low morale and irritation from staff who have to endure such situations. The workforce will not have to endure stress and shame if issues like inadequate record keeping, a lack of staff and resources, and a skills gap can be resolved. Creating a trustworthy workplace can also alter how staff members perceive legal proceedings. According to Maassen, Van Oostveen, Vermeulen, and Weggelaar (2021), a positive work atmosphere is crucial for providing quality patient care as well as lowering the rates of hospital-acquired infections, hospital mortality, readmissions and unfavourable occurrences like lawsuits.

Having a favourable work environment built on trust and integrity make necessary litigation bearable for staff. Maassen, et al. (2021) indicated that there are 36 elements that make up a positive work environment. The study further grouped the elements into four contexts as shown in Figure 7.10.

Figure 7.10: Defining work environments



Source: Adapted from Maassen, et al. (2021).

The figure above defines work environments which have a considerable role to play when assessing litigation and attitude of staff. If the work environment is not favourable, adverse events like litigation is more likely. The figure presented by Maasen et al., (2021) presents four contexts of the work environment which is consistent with the findings of the current study. The four contexts of work environment is the task, the social aspect of work, the physical aspect

of work and the organisational culture. It is important for the employee to understand the tasks that must be completed for clarity of the role to ensure that roles are non-ambiguous. The employees must also work in an environment which fosters respect and acceptance, co-operation at all levels to get the task done and fair conflict resolution. The physical working conditions must be conducive to the completion of tasks and teamwork and must have a positive impact on the physical and mental health of the employees (Maassen et al., 2021). In the current study, there appears to be fundamental flaws in the working environment. The most basic requirement to complete a task is the resources, which are either in short supply or unequally distributed having devastating effects on service delivery. Table 7.39 explored how unequal distribution of resources have affected their institutions based on the responses from Section C, Question 30.i.

Table 7.46: The challenge of unequal distribution of resources

How the challenge of unequal distribution of resources affects service delivery and QWL

Results:

Theme identified	Code	%
Compromised patient care/low service delivery	CP	31%
Unequal distribution amongst departments	DP	25%
Frustration/resentment/low QWL	FR	21%
Increased workload	IW	12%
Equipment challenges	EQ	11%

(N=95)

(n=57)

A total of 95 respondents (30%) indicated that there is an unequal distribution of resources. There were 57 responses that elaborated on their perceptions of the challenge. A thematic analysis is presented in Table 7.46. There appears to be compromised patient care and low service delivery (31%) because there is an unequal distribution of resources amongst departments (25%) leading to frustration of employees having to deal with less resources and a sense of resentment towards the departments that have all the resources as lack of resources may lead to a low QWL (21%). There is also an increased workload (12%) and challenges with

equipment (11%). Table 7.47 provides insight on how the challenge is perceived to impact on QWL and service delivery.

Table 7.47: The challenge of unequal distribution of resources-Responses

Statement	Code	Respondent number
Other departments have resources that we don't have. We have to borrow or share resources. Time is wasted. Delayed in treatment to patient	DP/CP	277
Quarrelling amongst staff causing lack of service to patient. Frustration from staff due to the unequal distribution	FR/CP	283
Severe lack of equipment. No BP machine, broken scale, we lack lots of equipment in the labour ward	EQ	286
Some departments receive new stock and staff regularly while other battle monthly.	DP/FR	307
We often have to run around looking for medication and resources	DP/CP	319
Some wards have excess stock while others have none. Everything must be fair, and we need easy access to resources for speedy treatment, decreased queues, lower infection rates	DP/CP/IW	241
Being demotivated as care is slower in some wards than others due to unequal distribution	FR/DP	249

Table 7.47 highlights that there appears to be a sense of resentment and frustration because only some departments are prioritised leaving others to fend for themselves by borrowing items thus delaying treatment. Further, the morale and motivation levels are affected as the increased workload leads to exhaustion and burnout. Burnout is seen to increase the intention to leave the profession (Hammig, 2018) leading to a major staff deficit in the healthcare sector globally (Muthuri, et al., 2020).

Table 7.48 reveals that there is a crisis in management and leadership at the selected hospitals. The responses in Table 7.48 is based on the responses from Section C, Question 30.j.

Table 7.48: The challenge of management and leadership crisis

How the challenge of management and leadership crisis affects service delivery and QWL

Results:

Theme identified	Code	%
Support and encouragement	SE	33%
Lack of skills/poor management	LS	30%
Accountability issues	AC	15%
Frequent changes	FC	10%
Lack of communication from leadership	CM	6%
Transparency	TR	6%

(N=84)

(n=48)

A total of 84 respondents (26%) indicated that there is an unequal distribution of resources. There were 48 responses that elaborated on their perceptions of the challenge. A thematic analysis is presented in Table 7.48. Support and encouragement from management ranked high as respondents expressed that having support and encouragement from managers not only assists with improving service delivery but also improves the quality of work life experiences. Supportive and encouraging environments in seen as favourable and fosters a culture of high motivation (Maassen, et al., 2021). Leadership influences culture, and strong leadership can improve staff satisfaction while also improving patient outcomes. For a successful organisation, leadership commitment is essential when implementing policies and procedure for quality improvement (Poorani, et al., 2023).

However, there seems to be a lack of skills and poor management reports by 30% of the respondents. Frequent changes in management (10%) can lead to frustration and accountability issues (15%) due to a break in communication or a lack of communication from leadership (6%). Some respondents also called for more transparency (6%) in decisions taken. Table 7.49 presents statements from the respondents from Section C, Question 30.j to demonstrate the constructs extracted.

Table 7.49: The challenge of management and leadership crisis-Responses

Statement	Code	Respondent number
Management support is not always available	SE	7
Nursing management changes often and sometime confusing	FC	15
Management ignores units that are in crisis	SE/LS	52
Most of senior managers resigning within 2 years leading to poor service from management	FC	57
Retention of upper management must be looked at. Management changes all the time leading to confusion	FC	61
Work falls into the hands of pharmacists making workload extremely high unnecessarily	AC	62
No transparency. Criteria for selection of managers is not clear. Criteria must be transparent	TR	95
Staff don't want to strike, and we are force to take these steps. Requests are made to management, but it falls on deaf ears	LS/CM	98
Sometimes those expected to lead leave thing not sorted for those left behind to see to the problems	AC	100
If the management are encouraging and supportive, it will improve our QWL	SE	133
Management is authoritative. Leadership does not understand the challenges on the ground. No proper consultation and nurses are rotated	LS/CM	200

From the remarks drawn from the qualitative responses shown in Table 7.49, it is clear that there a crisis regarding leadership and management at the institutions surveyed. There appears to be confusion regarding managerial duties and a lack of support which hinders service delivery. Transparency and clear reporting and communication channels are essential for ensuring that standard operating procedures are followed correctly and are successfully carried out. Maassen et al., (2021) cited clear work roles as one of the most important aspects in work environment to avoid role ambiguity. Communication and transparency can be used to ensure that everyone is clear about the task that they are required to complete.

Table 7.50 is based on responses from Section C, Question 30.k.

Table 7.50: The challenge of increased disease burden

How the challenge of increased disease burden affects service delivery and QWL		
Results:		
Theme identified	Code	%
Increased workload/burnout/exhaustion	IW	33%
Overloaded system	OV	24%
Longer stays in hospitals/cross infection	LS	20%
Lack of resource/staff	LR	18%
Compromised patient care	CP	5%
		(N=96)
		(n=55)

A total of 96 respondents (30%) claimed that the increased disease burden has impacted on their quality of work life and the way that they deliver service. There were 55 replies that went into more detail about how they perceived the challenge. Table 7.50 provides a thematic analysis of how the respondents perceive the increased disease burden facing the healthcare system. Key themes that emerged include burnout as 33% of the respondents reported an increase in workload leading to burnout and exhaustion due to an overloaded system (24%) and a lack of resources and staff (18%). Compromised patient care (5%) may result in longer stays in hospital and cross infection (20%). The respondents' statements in Table 7.51 expands on how they perceive the increased disease burden based on responses from Section C, Question 30.l.

Table 7.51: The challenge of increased disease burden -Responses

Statement	Code	Respondent number
It is important to change the disease process to alleviate the increased disease burden	OV	4
Compromised patients care and health of staff leading to dissatisfaction with QWL	CP	5
Patient's length of stay increases. Higher workload for staff. Minimum staff on shift	LS/IWLR	257

Like Covid- it is a lot to do. Like disinfecting workspace and screening of patients which delays the workflow. Staff also fear of being infected	IW	37
Staff burnout due to overbooking	OV/IW	41
There are more patients with the same number of staff. I am exhausted. The long waiting times increase workload	OV/IW	68
We get patients that are highly infectious and have been on almost all antibiotics. They are multi drug resistant. We catch the infection, and our family catches the infections from us	LS/LR	100
Especially during Covid. Patients and nurses were infected. Hospital has a whole unit full of ventilated cases. Staff were sick and exhausted	IW/LR/OV	101
Due poor hygiene linked to shortage of resources	LR	122

Shortage of staff and shortage of resources are challenges that inhibit the ability of frontline employees to respond efficiently when a crisis such as Covid-19 is encountered. Geyman (2021) revealed that the Covid-19 pandemic merely exposed existing problems and that the problems was not caused by the increased disease burden that was brought on by the pandemic. The USA has a market-based healthcare system that is mostly privatised and faces issues like unregulated costs and pricing, substandard quality of service delivery, vast gaps and inequities, and the marginalisation of public health. Geyman's (2021) case reveals that increased diseases does not place a strain on the system, the system is already strained. Facing more diseases just amplifies pre-existing problems as shown below based on the responses from Section C, Question 30.l.

Table 7.52: The challenge of large numbers of patients beyond the capacity of the organisation

How the challenge of large numbers of patients beyond the capacity of the organisation affects service delivery and QWL		
Results:		
Theme identified	Code	%
Increased workload/tired/fatigue/burnout	IW	25%
Short staffed/staff: patient ratio	SS	23%
Compromised patient care	CP	14%

Lack of resources	LR	12%
High pressure/hurry	PR	8%
Frustration, stress, helplessness	FR	7%
High infection rates/overcrowding	IN	7%
Slow response time	SL	4%

(N=161)

(n=146)

A total of 161 respondents (50%) claimed that there is a larger number of patients which is beyond the capacity of the organisation. The four stages of healthcare in South Africa denote increasing levels of technical sophistication and specialisation, which are frequently associated by rising healthcare costs. The number of patients seen at the primary level, which is often their initial contact with the healthcare system, drops as patients are filtered out of this level and into higher levels of specialist care at regional, provincial, and central hospitals (Ramsamy, Essack, Sartorius, Patel & Mlisana, 2018). The numbers of patients should ideally decrease as the levels increase. In the case of this study, high numbers of patients are still received at the central hospitals, perhaps because the lower levels are not fully functional, creating a burden on the fourth level.

There were 146 replies that went into more detail about how they perceived the challenge. The key themes identified is burnout due to increased workloads (25%) as there is a shortage of staff (23%) and a lack of resources (12%). The patient to staff ratio is uneven (23%) creating problems with service delivery such as slow response time (4%), working in a high-pressure environment (8%) where staff have to rush with patients to ensure that everyone gets treated. Such situations can lead to compromised patient care (14%). Staff have a sense of frustration created by the stressful environment (7%) making them feel helpless when they cannot help all patients. Below are examples of qualitative statements from the respondents.

Table 7.53: The challenge of large numbers of patients beyond the capacity of your organisation-Responses

Statement	Code	Respondent number

This means that no beds are available which increases the risk of infection and increases the spread of infection	LR/IN	1
Clinics run longer and we get tired quickly. We are overworked leading to high absenteeism. High number of patients, low number of very tired clinicians	IW/SS	307
Patients are sleeping on stretchers. Improve examination. Shortage of consumables and human resources	LR/CP	198
There is a massive overflow of patients beyond the capacity of the ward. Not enough staff to cope	SS/FR	248
This is when everyone works under pressure. Limited staff, limited resources. We are battling	PR/SS/LR	154
We get a lot of complaints because of this even though we are trying our best	PR/CP	288
Patient to Clinician ratio is unbalanced. More patients to care for. Leading to longer waiting time for patients and exhaustion for clinician	SS/IW/SL	181

The statements above from Section C, Question 30.l, highlight that challenges have a ripple effect from other challenges and impacts negatively on both service delivery and QWL. Employing more staff might be an option to overcome this problem, however it is imperative to ensure that the right people with the right skills are in the suitable positions. Additionally, ensuring that other facilities are working optimally will avoid the spillover effect where patients from other facilities are referred to central hospitals due to resource and equipment restrictions.

One of the issues that can be cited regarding large numbers of people is that everyone has access to health care services, according to the South African Constitution, and “no one may be refused emergency medical treatment." Additionally, free basic healthcare is provided to all elderly people and free services for mothers and children. Seven out of every ten households depend on public health services due to the high cost of living and low-income rates. Consequently, all citizens of South Africa, including refugees and asylum seekers have a right to get medical care (South Africa: voluntary national review (VNR) report, 2019).

The influx of refugees and migrants into South Africa has been putting unprecedented demands on the already weakened healthcare sector in South Africa. A lack of documentation and

financial constraints have led to overcrowding in public hospitals and clinics. Apart from stretching resources there is also a risk of disease transmission and exposure to new strains of diseases further leading to other problems such as longer waiting times delay treatment and compromised patient care (White and Rispel, 2021). Responses from Section C, Question 30.m indicates that there is a challenge relating to the speed at which restructuring is occurring in South Africa.

Table 7.54: The challenge of slow progress in restructuring the healthcare system

How the challenge of slow progress in restructuring the healthcare system affects service delivery and QWL

Results:

Theme identified	Code	%
Lack in implementation	LI	31%
Motivation/morale	MT	27%
Lack of resources to implement	LR	25%
Corruption	CR	6%
Impacts on QWL	QL	6%
Impacts on service delivery	SD	5%

(N=103)

(n=64)

A total of 103 respondents (32%) believe that there is slow progress in restructuring the healthcare system including policies adopted by government to enhance the quality of healthcare delivery. The 64 qualitative responses revealed themes that gives insight on how the challenge is perceived by the respondents. The respondents indicated that while there are plans on paper, there is a lack of implementation (31%) as the plans lack the proper resources, both human and material (25%). There is a problem with corruption (6%) leading to low motivation and morale (27%) which impacts negatively on QWL (6%) and service delivery (5%). The statements presented below from responses from Section C, Question 30.m in Table 7.55 demonstrates feeling of no confidence and hopelessness in the healthcare system.

Table 7.55: The challenge of slow progress in restructuring the healthcare system-Responses

Statement	Code	Respondent number
All talk and no action	LI	288
Very slow pace to change resulting in fatalities. The system does not work	LI/MT	315
They talk about new strategies from government, but no budget to fulfil those strategies. All talk and no action	LI/LR	286
There is no government. There is only hooligans and inconsiderate unqualified people	CR	140
Bad or poor impact on QWL	QL	169
We push ourselves hard to help each and every patients despite limited resource	SD/QL/LR	251

Despite the many challenges, government is still extremely slow in implementing plans to overcome the challenges. The statements above echo feeling of perseverance, that despite the difficult working environment, the frontline healthcare workers are still trying their best. They appear to have lost faith in the system because there is no follow through when plans are made, or the policy makers must make plans that are do-able. A lot of the plans are made, but due to a lack of resources or leadership to drive the projects, the plans are never implemented.

The results presented in this section is synonymous with Siziba and Barnard (2023) who conducted research on the QWL of doctors who specialise in Oncology in a South African context. The study also reported a lack of medical resources, staff constraints, poor infrastructure, work life conflict, managing multiple roles and support issues at all levels. Although these problems identified and discussed in detail, the authors also noted that there is a deep commitment for meaningful work and a passion for career achievement and professional development. Additionally, the study also reported a desire for learning and development.

Table 7.56 revealed responses from Section C, Question 30.n which investigated how the challenges of water shortages affected service delivery.

Table 7.56: The challenge of water shortages on a regular basis

How the challenge of water shortages on a regular basis affects service delivery and QWL		
Results:		
Theme identified	Code	%
Hygiene	HG	35%
Service delivery	SD	35%
Infection	IN	15%
Health risk	HR	10%
Hot water	HW	5%
		(N=39)
		(n=20)

There were 39 (12%) respondents who indicated that they experience water shortages at the place of work on a regular basis. Concerns were cited regarding hygiene (35%) and infection (15%) which poses a health risk (10%). Some respondents indicated that there is water, but there is no hot water. To stop the spread of infectious diseases, healthcare institutions must have a reliable and sufficient water supply. The main issues with the water supply were interruptions in the system, a lack of a method to evaluate water quality and sanitation. A vital defence mechanism against the spread of infectious diseases is the provision of handwashing facilities with clean water and soap (Berihun et al., 2022). Qualitative responses from Section C, Question 30.n were received from 20 respondents and are listed in Table.57.

Table 7.57: The challenge of water shortages on a regular basis - Responses

Statement	Code	Respondent number
It distracts worktime and hospital is not as hygienic as it should be	HG	91
Poor nursing care. Increased infection. Poor hygiene	IN/HG	85
Poses health risks to both staff and patients	HR	201
Some basins are not working in the labour ward. No water	SD	120
Sometimes patients don't bath	HG	246

This leads to poor hygiene and increased disease burdens in our communities	HG/IN	19
Water shortages delays theatre cases, we cannot function when there is no water	SD	1/206
No hot water	HW	184-185-186

Delays in service delivery, reduced infection control and compromised patient care are some of the common concepts mentioned in the aforementioned assertions in Table 7.57. Water is a critical component of health care reform and ensuring access to clean, safe water should be top priority for policymakers and healthcare providers. Water is used for drinking as it helps regulate body temperature, transport nutrients and flashes out toxins. In a healthcare setting, ensuring that patients are adequately hydrated is critical to maintaining their overall health and well-being. Water is also essential for maintaining hygiene and avoiding the spread of diseases. In healthcare facilities, water is used for hand washing, cleaning medical equipment and disinfecting surfaces. Clean water is critical to preventing the spread of infections and keeping patients and healthcare workers safe. Many medical procedures rely on water, such as dialysis, surgery and wound care. Without access to clean water, these procedures would not be possible, and patients will suffer. Additionally, water is also used extensively in medical research, from testing new drugs to developing new treatments. Without access to clean, safe water, medical research would be severely limited, making it more difficult to improve healthcare outcomes (Berihun et al., 2022).

The issue with hot water might be related to loadshedding. A thematic analysis of the challenge of loadshedding from responses from Section C, Question 30.o is presented in Table 7.58.

Table 7.58: The challenge of loadshedding

How the challenge of loadshedding impacts on service delivery and QWL

Results:

Theme identified	Code	%
Delay/interruption of workflow	DL	28%
Airconditioning	AC	21%
Quality of work life	QL	17%
Compromised patient care	CP	10%

Infection	IN	7%
Equipment	EQ	6%
Pressure	PR	6%
Increase workload	IW	5%

(N=116)

(n=112)

There were 116 (36%) respondents who indicated that the loadshedding impacts negatively on their ability to deliver high quality service and sustain a good QWL. Themes that were prevalent indicated by 112 qualitative responses show that there is a delay in workflow (28%) as certain treatments are too risky to complete without electricity and some equipment (6%) does not work. Airconditioning (21%) does not work during loadshedding as priority is given to life saving equipment. Additionally, hot humid conditions are a breeding ground for infections (7%). Staff experience a low QWL (17%) as manual procedures results in higher workloads (5%) in a pressurised (6%) environment. Table 7.59 sheds light on the themes highlighted from the responses in Section C, Question 30.o.

Table 7.59: The challenge of water shortages on a regular basis - Responses

Statement	Code	Respondent number
Causes us to use manual operations and it takes time	IW	233
Compromised patients care leading to dissatisfaction with QWL. No aircons work during loadshedding	CP/QL/AC	5
Computer needs to reboot which holds up my work	DL/EQ	104
Extreme discomfort for patient as no aircon. Not ideal conditions for preventing infections. Also discomfort for staff	AC/IN	278
Interruption of work. Less lighting and low ventilation	DL/CP	280
Interrupts work schedule. Increases duties at home. Delays traveling time to work	DL/IW/QL	220
Loadshedding affecting mostly in theatres. Surgeons are unable to operate thus increasing mortality	CP	57
Really interrupts quality care though its only for a few minutes. But those minutes count in an ICU setting. There is disaster at	CP/QL/PR	100

home when we have loadshedding for days. This increases my duties at home and increases travel time to work		
We do not work during loadshedding because we do not risk starting a procedure even though we have a backup generator. Sometimes machines malfunction during loadshedding, putting patients at risk. This means that the work piles up. Airconditioning don't work in theatre	DL/EQ/IQ	255
When there is loadshedding, generators only power up patient's machines. A colleague did collapse because of the heat	QL	98

The government has implemented a strategy where hospitals are exempted from load shedding however it appears that the institutions still experience resultant challenges due to equipment being damaged by loadshedding, certain equipment not working during loadshedding due to the capacity of the generators installed. Loadshedding is not unique to the healthcare sector. Responses from Section C, Question 31 which gave the respondents an opportunity to make suggestions to improve their QWL are tabled in Table 7.60.

Table 7.60: Suggestions to improve QWL

Suggestions to improve your QWL

Results:

Theme identified	Code	%
Focus on shortage of staff	SS	26%
Focus on lack of resource	LR	14%
Focus on training	TR	12%
Focus on creating a better working environment	BW	12%
Support from management and acknowledgement	SM	11%
Focus on salary	SL	10%
Focus on high quality work	HQ	6%
Communication	CM	3%
Focus on equipment	EQ	2%
Transparency in decision making	TP	2%
Collaboration	CL	1%

Accountability	AC	1%

Multiple responses recorded

(n=323)

There were 323 responses of which multiple responses were recorded. The thematic analysis is presented in Table 7.53. Key focus areas were identified and recommendations to improve QWL were made. The highest priority, according to the results is to focus of staff shortages (26%) and lack of resources (14%). Respondents also indicated that training (12%) may contribute to a better working environment (12%). Support from management (11%) and acknowledgment from seniors was also important to the respondents. Only 10% indicated that salary must be looked at and 6% believe that there should be a focus on high quality work. Communication (3%), equipment (2%) and transparency (2%) were highlighted as well as collaboration (1%) and accountability (1%). Each theme will be discussed in detail in Chapter Eight as the question relates to recommendations which will be covered in the next chapter.

7.10 Summary of quantitative and qualitative findings

The results presented in this study proves that all the challenges faced are connected. The qualitative replies demonstrate that problems compound one another; for instance, the shortage of staff is related to the lengthy waiting times. It is crucial to heed the call for more training and better working conditions given that a sizable portion of employees say they enjoy their jobs and perceive value in the services they deliver.

Only 1% of respondents said they have a good work-life balance although many employees left their previous jobs to join the current institutions for reasons related to their home lives and professional development. Since the need for professional development was a recurring theme that surfaced under the majority of qualitative discussions, it cannot be ignored. The staff indicated that they receive training, however it is critical to recognise that continual training relevant to the work that the respondents are performing as well as refresher courses are needed. Only particular skills are gained through some training, which is general and sometimes irrelevant to the job being performed.

Additionally, there is a need to address the staff shortage to overcome the challenges such as lengthy waiting times and poor service quality. However, recruitment must be strategic as

having the proper personnel with appropriate abilities is crucial. The proper people, with the right skills, in the right jobs are crucial so that they can be held responsible when something goes wrong and commended for a job well done.

By ensuring that there are enough resources (material and staff) available to enable a conducive atmosphere, problems like infection control and poor hygiene can be resolved. The use of technology may help address issues like inadequate record keeping, but it is useless if the workforce lacks the computer literacy to make the most of it. Although communication from senior management is acknowledged, departmental communication might use some enhancement. The solution to the problems raised by a leadership crisis and a spike in litigation may lie in effective communication. There seems to be a lot of plans, but there are not enough resources to carry them out, thus the reform of the healthcare system is moving slowly.

In South Africa, problems with electricity and water are a national catastrophe, and hospitals are not exempt. Resultant issues arise for those hospitals that are excluded, such as hospitals that use generators to combat load shedding, only some of the equipment is operational and some equipment is harmed by frequent switching on and off. For water, some basins are not operational and hot water appears to be a luxury.

Some similarities were noted between the quantitative and qualitative responses reported which may indicate triangulation.

7.11 Triangulation

A detailed literature analysis covering three chapters (Chapters 2, 3, 4, and 5) that address challenges affecting the global healthcare system, as well as the collection of quantitative and qualitative data, revealed a few parallels. The overall observation reflects that the problems faced by frontline healthcare staff have a negative impact on service delivery. Addressing difficulties such as insufficient training and funding, uncomfortable working conditions and irrelevant training are critical to improving service delivery in South Africa.

Triangulation was observed in the literature review, qualitative data and quantitative data. The use of two diverse data sources and methodologies to verify validity by integrating different sources in one study is referred to as triangulation (Wagner et al., 2012 and Bryman, 2012). A

total of 322 frontline healthcare workers provided quantitative and qualitative data. To demonstrate the triangulation analysis utilised in this study, the discussions below were employed in this study and for triangulation.

Section A and Section C used both qualitative and quantitative techniques to explore motivation factors of the frontline employees. The quantitative question 28 in Section C asks, "what motivates you the most?" and the qualitative question 5 in Section A asks "what are the best aspects of your job?" Additionally, Question 8 in Section A asks, "What are the reasons for leaving your previous job?" Asking the aforementioned questions using both qualitative and quantitative techniques assisted the researcher to gain in-depth knowledge on motivation factors for frontline healthcare workers. According to the secondary data presented in Chapter Four, the accomplishment of the successful healthcare systems globally is largely contingent on the knowledge, skill and motivation of the employees (Muthuri, Senkubuge and Hongoro, 2020). Moreover, in chapter five, Soo-Lee et al., (2015) advocated that intrinsic and extrinsic motivations of employees have significantly different effects on job satisfaction. When analysing the Self Determination theory in Chapter Five, it was determined that by understanding and addressing the basic psychological needs of autonomy, competence, and relatedness, hospitals can create a culture that supports the well-being and motivation of both healthcare workers and patients. Supporting healthcare workers' autonomy involves allowing them a sense of control and choice in their work. Similarly, the Human Relations theory concluded productivity and motivation levels of the employees rely on more than just physical aspects of the work environment. Asking the questions is different ways to tie up with the literature revealed results that assisted with developing the model presented in Figure 8.3 in Chapter Eight. Section B, Question 15 asked a qualitative question based on which skills was improved during the training. Quantitative question 20 also aimed to explore which skills were improved during the training attended by respondents. Understanding the skills acquired and required by responses gave insight into the capabilities of the respondents to provide excellent service delivery. To tie up with the literature, discussions in Chapter Four reveal that healthcare workers are accountable for decisions and actions that directly influence human life and there is no space for error. As a result, possessing the appropriate set of skills and competences will ensure that the person is suited to the job. Healthcare workers must be aware of disease prevention techniques, recognise that their job includes trauma management and understand that conditions change, therefore staying up to date on new advances is essential. Recognising and acknowledging expectations, as well as the willingness to protect oneself from sickness

and cope with indirect trauma with high degrees of professionalism while remaining motivated, are critical to job satisfaction, which influences institutional performance. Healthcare providers should feel more empowered and compassionate towards others (Korkmaz, Kazgan, Cekic, Tartar, Balci, and Atmaca, 2020). The results from the respondents are in sync with the literature.

Quantitative question 16 and qualitative question 22a both aimed to explore which skills still needed to be improved, while quantitative question 19 asked respondents to tick which skills can be upgraded through training. Asking the question in three different ways gave the respondents the opportunity to expand their responses resulting in a more robust dataset. The results are consistent with literature presented in Chapter Four based on the critical skillset of the frontline healthcare workforce citing soft skills such a flexibility, versatility and the ability to deal with crisis (Vijayasarathi and Khosa, 2020), strong problem-solving and decision-making skills (Korkmaz et al., 2020) and being able to work as part of a team and collaborating with other healthcare providers to provide coordinated and comprehensive care (Mukinda, Van Belle and Helen Schneider, 2020) as important. Additionally, technology-related skillsets was cited as crucial to the ability of an institution to innovate and adopt new technology to enhance productivity and remain competitive (Dohan, Green and Tan, 2017) which respondents also agreed with in their responses.

7.12 Conclusion

According to the objectives of the research study, this chapter offered the research findings and an interpretation of the findings from the qualitative and quantitative components of the study. Both facets of this research study showed that frontline personnel had low QWL, which has an adverse effect on service delivery. Along with the urgent requirement for streamlined leadership and effective technical system enhancement, there is also an inherent demand for training and skill development and improvements to working environment. The gathered data has given rise to a substantial amount of crucial information, upon which this research study's results and suggestions can be founded. Chapter eight contains these insights and suggestions.

CHAPTER EIGHT

CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

The last chapter will draw conclusions and provide recommendations based on the important findings discussed in Chapter Seven. The key findings discussed in Chapter Seven serve as the foundation for the conclusions and recommendations presented.

8.1.1 Overview of theoretical orientation

The background information and a description of the research problem were introduced in Chapter One, together with the aim, objectives and research questions. Chapter Two analysed the global influences that have disrupted the world in the context of global healthcare systems. Chapter Three presented a global impression of the health care industry and examined potential best practices. The sustainable development goals from Agenda 2030 were discussed and healthcare systems around the world were analysed. Chapter Four explored issues around service delivery in the South African healthcare sector and analysed literature surrounding challenges that may have an impact on the delivery of quality services. The conceptual framework and theoretical underpinnings of the study was examined in Chapter Five which investigated pertinent theories that other authors have employed in Quality of Work Life research studies. Chapter Six discussed the study methods used to gather the data that was presented in Chapter Seven. The data was presented using tables, graphs and figures which will be discussed in this chapter, and is presented in accordance with the objectives of the study. General conclusions are offered, and the recommendations are based on the main aim of the study.

8.2 Aim of the study

The aim of this study was to report on the quality of work life (QWL) experienced by frontline healthcare workers in the South African healthcare sector and to assess how QWL affects their ability to deliver a high quality of service. To achieve the aim, a questionnaire was developed based on 4 objectives. The conclusions from the findings of the primary research will be discussed in detail under each objective.

8.3 Objectives and research questions

Objectives

1. Investigate the expectations of frontline healthcare workers after they embarked on the healthcare quality training.
2. Determine what knowledge and skills were acquired from the healthcare quality training.
3. Discover the current QWL experiences of frontline healthcare workers.
4. Propose a model to promote high quality of work life to ensure that a high quality of service is provided.

Research questions

1. Are healthcare workers able to deliver high quality healthcare?
2. What are the experiences of frontline healthcare workers in their daily service delivery duties?
3. What are the challenges that they experience regarding service delivery?
4. How do challenges impact on their quality of work life?
5. How effective are current interventions in dealing with challenges?

8.4 Conclusions

General conclusions are presented as per the four research objectives set out at the proposal stage of the research.

8.4.1 Objective 1: Investigate the expectations of frontline healthcare workers after they embarked on the healthcare quality training.

It was established that the respondents did indeed attend training, but they were unsure if the training formed part of the NQHIP. Respondents answered that they attended all training under the pretext that any type of training would be good and improve their capacity to provide healthcare services. Respondents stated that their skills were improved, but their expectations were not understood, and some felt that their QWL did not improve. The courses they took did not enable career advancement. These classes comprised communication and personal development courses that included issues like accountability, commitment and empathy, which not only increased confidence but also improved communication skills and stress management.

The respondents indicated that such courses have enabled them to understand their role better. However, there was a call for more courses to enhance their work skills to facilitate career advancement. The courses listed below enhances the hard skills and practical skills of the respondents. The courses that were requested include:

- Administration and education/ Administration in nursing
- Advanced computer training including MS Word
- Advanced mid wifery
- Analysing influences
- Audits, statistics
- Budget, management skills, SAP, SEM
- Clinical medicine
- Ward admission protocol
- Language skills to enhance communication between patient and nurses
- Conflict management
- Critical care nursing course
- Dialysis
- Emergency care
- Episiotomy
- Family planning Prep (ARV) Management skills
- HIV and Aids
- HVV Dialysis
- Support to become a professional nurse
- Infection control
- Inter disciplinary relations
- Junior staff supervision
- Knowledge of medication terminology
- Management and education course
- SHERQ skills
- More oscillator training required
- More training required in ultrasound guided procedures
- More ventilator training, ICU training, Neonatal resuscitation

- Nephrology
- Pharmacology, generic names of medicines
- Recording keeping
- Spirometry, Audiometry, Vision training

When highlighting the training requirements above, the respondents also indicated that the training should be continuous and refresher courses must be offered to stay up to date with the changes. They also indicated that improving computer skills will not only improve communication but also alleviate some of the stress associated with record keeping and communication.

According to the quantitative findings, 64% of the respondents are from the ward and nursing, and 66% of them were between the ages of 31 and 50. Sixty one percent of them are still not managers, despite 42% of them having worked in their current job for six to fifteen years. It can be viewed that employees are seeking career advancement as there were calls for more training with regards to work skills and management skills. Majority of the respondents are in mid-career and have been there without upward movement. Participants who indicated that the training did not enhance their QWL cited reasons in the qualitative data showing that 41% indicates that they require courses to facilitate their career advancement and 20% require refresher courses.

The training enhanced the QWL of majority (67%) of the frontline healthcare workers but only 8% fully understand their role and there was only a 1% decrease in errors showing that the training was unsuccessful or irrelevant. Also, there are more instances of staff litigation as staff have to fill roles that they are not confident in due to the staff shortage. They are also not quite sure if the training they require is available to avoid instances of litigation.

Majority of the quality improvement projects involve training and employees believe that funding, resources and support from management are key factors in implementing these training projects. While 54% of respondents agreed that it is the frontline worker's responsibility to drive service quality initiatives like training and that their role is to participate in training, they did not think that training was the only thing that would improve their ability

to deliver higher-quality services or raise their QWL. Staff are willing to upskill themselves and take great pride in the work that they do.

Additionally, employees suggested that academic growth is difficult with short courses and prefer to do longer courses such as degrees which are better recognised. They would also prefer to collaborate with different professionals to acquire the latest knowledge as medical science is changing daily.

8.4.2 Objective 2: Determine what knowledge and skills were acquired from the healthcare quality training.

To achieve objective 2, the researcher compiled a list of critical skills based on section 4.4.1 of the literature review. The respondents were asked to rank which they viewed were most critical as frontline healthcare workers. The results showed skills that were more of personal characteristics rather than a trait that can be attained through training. The training may enhance the characteristics, but it is difficult to teach a trait such as empathy through training.

According to the findings of this study, frontline healthcare workers must be aware of their patients and their surroundings, which necessitates empathy, compassion and confidence. The capacity to convey treatment measures effectively to the patient and the team is critical to the job and will develop trust among team members and patients, making dependability and reliability unavoidable.

Moreover, the findings suggest that front-line healthcare workers must be alert, assertive and receptive, as well as adaptable in a continuously changing workplace. Frontline healthcare workers who can deal with stress successfully and are active learners will be better able to keep a positive attitude and display excellent work ethics. Decisive behaviour necessitates a certain level of assertiveness, which can be gained through information gained through active learning. Decision making is simplified when the frontline staff is alert and receptive. It is simpler to handle stress and develops a positive relationship between the team and the patients when proper, well-informed judgements are made.

Technical knowledge is required for front-line employment in the healthcare industry as per the findings. Being digitally savvy/smart refers to the ability to use digital technologies efficiently. When frontline workers are technologically savvy, they have the flexibility needed to complete tasks efficiently. To keep up with the latest technological breakthroughs, this talent requires ongoing training.

Work related skills and communication skills were noted by respondents as skills attained during training. Attainment of these skills were seen to increase the capability of the frontline healthcare workers to do the work better due to the skills improvement offered with the training. However, there are still calls for more training as outlined under objective 1. It can be concluded that not all healthcare workers have all the skills that they require to deliver high quality healthcare as 72% of the respondents made recommendations for skills improvement under the themes of career advancement (41%), continuous training/refresher courses to stay current (20%) and computer/digital skills (11%).

8.4.3 Objective 3: Discover the current QWL experiences of frontline healthcare workers

To achieve objective 3, the questionnaire was constructed with the following research questions in mind:

- How do frontline healthcare staff describe their everyday service delivery duties?
- What are the issues they face in terms of service delivery?
- How do challenges affect their job satisfaction?

Both qualitative and quantitative methods produced notable outcomes. First, the QWL determinant was considered, followed by a series of open and closed ended questions centred on the determinants. The discussions will centre on the factors that influence QWL.

Figure 8.1: Determinants of QWL

Source: Author generated from the literature review

Section 5.15 of the literature review indicated that there are several factors (determinant) that determine QWL. Each determinant depicted in Figure 8.1 is connected to the others and has a similar role in achieving a high QWL and the finding is discussed below. It was crucial to gauge how respondents felt about their normal workdays and how they felt about service delivery and QWL because QWL is thought to affect the quality of services provided.

Well-researched challenges were listed in the questionnaire, and respondents were questioned about how the challenges affected their QWL and service delivery. Figure 8.2 summarises the challenges highlighted in the responses from the questionnaire.

Figure 8.2: Summary of challenges

Shortages	Adverse events
• **Staff** Skills and training Management and leadership crisis • **Resources** Lengthy waiting time Poor hygiene Poor infection control measures Poor recordkeeping Unequal distribution of resources Water shortages on a regular basis Load Shedding	Increased litigation because of avoidable errors Increased disease burden Large numbers of patients beyond the capacity of your organisation Slow progress in restructuring the healthcare system including strategies adopted by government to improve the quality of healthcare delivery.

Source: Author generated from secondary research

The discussions of objective 3 were guided by Figures 8.1 and 8.2. The front-line healthcare workers shared their QWL experiences and provided insight into some of the challenges that prevent the delivery of high-quality services. It is clear that the difficulties listed in Figure 8.2 make it more difficult to achieve high QWL, as indicated by the determinants in Figure 8.1 which reveals that there is a distinct relationship between the QWL experienced and the challenges.

8.4.3.1 Favourable work environment

A favourable working environment in the healthcare sector plays a substantial role in the well-being of healthcare professionals, patients and the healthcare facility as a whole. It helps to maintain team morale, reduce errors and promote high quality work. It enables the staff to provide better care to patients which benefits the healthcare facility.

However, the respondents report that there is inadequacy of key components of service delivery namely resources, staff, medical supplies, electricity, and water. These shortages have a ripple effect on the healthcare facility and results in other challenges which include lengthy wait times, poor hygiene, poor infection control measures and poor record keeping.

The lack of material resources had majority of the respondents complaining of high cross infection rates due to poor hygiene measures as there are not enough cleaners and supplies to clean. The laundry is never on time and the patients stay in soiled linen due to the shortage resulting in delayed treatments and procedures in theatre. The high cross infection rates means longer stays in hospital creates strain on the system. The staff are also not safe as they get infected leading to high absenteeism thus increasing the workload and causes frustration for staff at work. Patients also sit in overcrowded conditions for long periods of time which increases complications and compromises patient safety.

Some resources are not distributed evenly leading to staff having to go to other departments to borrow supplies which delays treatment which increases the workload of the staff. Equipment that breaks takes a long time to fix and staff must make alternative plans to help the patients. There was also an appeal for hospitals to buy original products.

Comments regarding record keeping alluded to a shortage of stationery for manual record keeping or no computer system for digital record keeping. Those who have a computer system to keep records indicated that they need some training to enhance the computer skills. Others are appealing for a computer system because they are keeping records on small pieces of paper which is easily lost. When the paper is finished, no records are kept. A problem with WIFI was also cited where staff use their own data to communicate.

The shortage of staff is a prominent theme indicating that this challenge is the foundation of the other challenges cited. Hiring more staff may solve many challenges but it is imperative that the right staff are in suitable positions as a management and leadership crisis was cited. Due to a lack of skills and a low understanding of what is happening at ground level, leaders are making wrong decisions regarding training and distribution of resources. Some respondents cited that there are frequent changes in leadership leading to accountability issues. There is also no transparency in the way leaders are selected. Additionally, staff are taking a long time to get to leadership positions which inhibits their ability to increase their earning. Large numbers of patients beyond the capacity of the hospital and a shortage of staff leads to an increased level of litigation because of avoidable errors as staff take on more duties particularly in times of increased disease burden.

Compensation and rewards are seen as motivational factors for being at work as it enables employees to meet their personal and social commitments. Generally, employees are satisfied with their jobs if there is "fair pay." When asked what motivates them the most, salary increase came in third ranking after recognition and promotion which reveals that the frontline employees are not driven by money but simply wants to be recognised for their work by being rewarded with a promotion to enable the salary increase. They are willing to change their roles and take on higher level work for a salary increase.

When pay is perceived as being unjust, it may result in low commitment, high absenteeism, and high turnover rates. High absenteeism rates are seen in this study, but they are caused by staff members being ill as a result of widespread infection and inadequate infection control practices because of a lack of resources. The length of service demonstrates a low turnover rate as frontline workers are in their positions for a significant amount of time, with 63% of them having worked as frontline workers for more than ten years. Long service is attributed to favourable pension benefits and a high employer percentage contribution. High commitment levels are also noted.

Even though the break times are short, the respondent indicated that they do have a place to eat and rest. Additionally, extra leave is sought due to the lack of family time because of the lengthy work hours. Due to a staffing deficit, the working hours have increased which requires investigation. Based on the discussion and the responses provided, it can be concluded that the conditions under which the frontline workers are performing daily duties are unfavourable and not conducive to the provision of high quality of services and high QWL.

8.4.3.2 Training and QWL

Training was covered under objective 1, but in this section, the effects of training on QWL will be assessed considering the feedback given by the respondents. Training seemed to have raised employee morale, job performance and job satisfaction proving that upgrading health literacy will increase organisational commitment and performance. Employees appeared to have a higher emotional intelligence and were better able to handle their jobs that required creative thinking and adaptability more effectively. In addition to building technical competencies, the training built effective communication, helped coach staff through change, particularly during Covid-19 and enhanced problem-solving skills and conflict management.

The training also led to effective team building and team leadership capabilities, showing that a lack of frequent professional development undermines efforts to offer high-quality care and is a significant factor in job unhappiness. Many who viewed the training as insufficient were concerned about their chances for career advancement, higher education opportunities and access to continuing education. Additionally, employees indicated that if they are enrolled in an educational programmes, they would be less likely to quit their jobs. The responses suggested that for the purpose of providing patients with high-quality care and achieving their own high QWL, healthcare personnel must frequently update their knowledge and abilities as their competence and performance is suffering due to an absence of relevant training programmes.

A higher percentage of the employees indicated that while the training was beneficial in the aforementioned ways, the training did not improve their QWL and call for more relevant training in an effort to provide high quality of service and achieve high QWL. The courses were mentioned in section 8.4.1.

8.4.3.3 Organisational culture and climate

Under this heading of organisational culture and climate, the themes of relation and co-operation, autonomy of work and litigation will be merged to give a holistic view of the current situation at the healthcare institutions selected. It was notice that these themes are interrelated and cannot be separated in the discussion.

Organisational culture is grounded by policies that should ensure conducive and supportive work environments that involve engagement and good communication which help organisations match work activities with the needs of their employees. Relation and co-operation from employees relate to how employees engage with each other and work harmoniously together to achieve the goal of high-quality service delivery despite the challenges that they experience. Autonomy of work is where employees have the freedom to make decisions that impact on their work and they are able to plan, coordinate and control their daily activities by themselves, giving them a sense of independency.

Many respondents lamented the high disease burden, which makes it more difficult to find trained healthcare workers because these professionals are frequently overworked and burnt

out. The complications that follow include a longer stay in the hospital costing more money, but there is also a higher risk of patient death, which increases the number of legal claims. These problems have an effect on the organisation's ability to provide services, increase credibility, and maintain financial health. Implementing policies that promote an autonomous and co-operative workforce can help ensure that despite the challenges, high quality service delivery is still possible.

Although, teams are committed to their jobs and they inspire each other, the results show that a sense of ownership and accountability is still relatively low. There was also a low sense of interdepartmental teamwork. The interdepartmental communication is at a moderate level however the communication within the department needs improvement. Only a few respondents indicated that they enjoy the team that they work with and work well with the teams. There is insufficient collaboration as respondents indicated that they wish to adopt a more collaborative approach.

Respondents believe that there is a supportive organisational culture that is capable of high-quality service delivery, but the resources are short which inhibit the execution of new quality improvement plans. Additionally, there are also key individuals within the teams who are resistant to change. There are no incentives offered to implement plans related to service quality improvement although recognition was a high priority in motivating staff.

Service delivery is so bad that patients abscond because they have no faith in the treatment that they are creating more work for the staff as they need to write reports and go forward with the litigation processes. Additionally, staff members work beyond the scope of their duties with minimum training and cannot be held accountable if things go wrong. There is an overall lack of motivation as respondents expressed fear of losing their jobs.

Workloads are heavy due to shortage of staff and increased disease burden and lack of resources. There are not enough career advancement opportunities. Leadership roles are not well defined and the frequent change in leadership causes confusion. Non-support and lack of encouragement from management with an inflexible attitude were recognised as the main leadership challenges. The hiring of unqualified individuals for management jobs or a lack of management skills showing a critical need for management training. Corruption and lack of transparency in the employment process were reported. Accountability is challenging since

changes happen frequently. Strong leadership is essential in light of the growing disease burden. It is important to hire and retain accountable individuals.

We can draw the conclusion that the organisational atmosphere does not support raising the standard of services provided and raising QWL. A favourable climate may be maintained, nevertheless, with changes in attitudes, effective leadership, and support from higher levels.

8.4.3.4 Work life Balance

When calculating WLB, age and gender are important variables to consider. Younger females may find it challenging to sustain a WLB, whereas older workers and some men may have a higher WLB because of having fewer duties at home. A QWL study conducted in Ethiopia that surveyed mainly male healthcare workers, showed that they have a good QWL (Mosisa, Muktar, Adugna, and Bizuneh, 2022.) However, results in the current study reveal contradictory results because 81% of the respondents were females between the ages of 20 and 50 (83%). They primarily work in the clinical, ward, and nursing (71%) areas of the hospital, which explains why there was a focus on mental health and many people expressed complaints about feeling emotionally drained. In addition, load shedding and water restrictions increase domestic duties to make sure families are taken care of while respondents are at work.

Higher workloads due to staff shortages lead to exhaustion and burnout. Although the elderly and the children do have care while the respondents are at work, higher rates are paid due to the longer working hours and irregular hours that the respondents work. However, the shift work does not have a negative impact on their lives. The respondents specified that they do not have much energy to engage in family activities after work and are asking that leave policies be reviewed in light of the longer working hours and stressful working conditions that cause physical and mental fatigue.

Absenteeism, frustration and low productivity resulting from a poor work life balance is noted in both the qualitative and quantitative aspect of the study. The respondents do believe that the problems can be solved through proper policy implementation and stronger leadership and may increase pride in their jobs and the respondents want to be recognised for their contribution to society as 63% are serving their communities for more than10 years. There appears to be very low levels of recognition although recognition was identified as the highest motivation factor

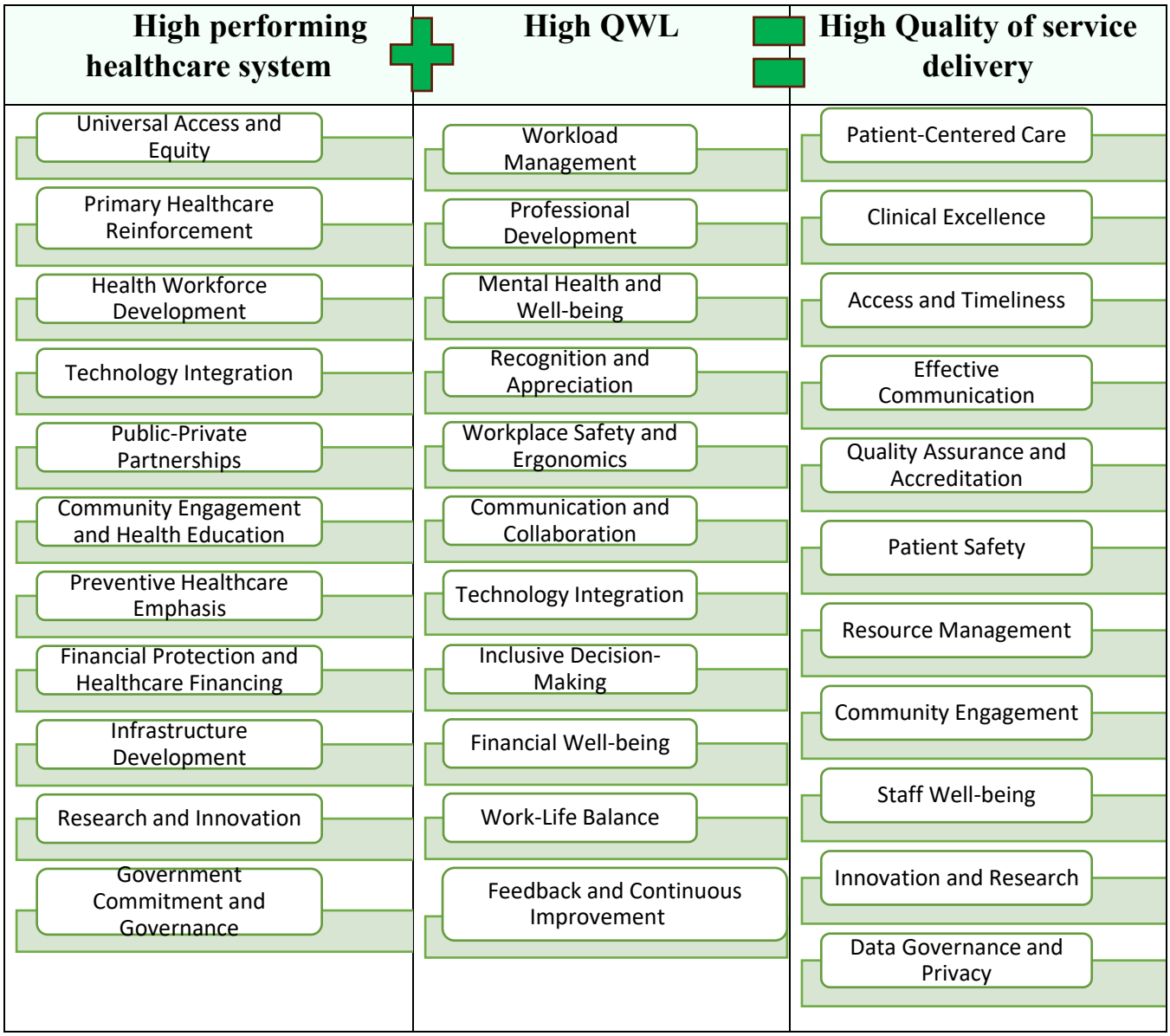
over and above the good benefits that they get. With the limited opportunities to upgrade their skills, the chances of them moving out of their workspace is limited and lower chance of promotion is noted.

8.4.4 Objective 4: Propose a model to promote high quality of work life to ensure that a high quality of service is provided.

A theoretical model was presented in Chapter Six which indicated that many aspects should be considered to achieve a decent QWL. The list of QWL determinants included the elements that have been proven to have the greatest influence on QWL through the literature review. When the QWL determinants are met, a high QWL results, which is demonstrated by satisfied workers, a productive work environment, etc. In the end, having a QWL-friendly workplace leads to the ability to give high-quality services. Patient satisfaction, the capacity to deliver the best patient care, and the success of treatments are traits of a system with high QWL. Funding is often attracted to productive workplaces, which supports the health system as a whole. However, this is only relevant if the system does not encounter problems.

Based on the findings of this study, the researcher was able to adopt a progressive attitude after interpreting the findings that formed the basis of Figure 8.1. The research suggests a methodology that illustrates the correlation between QWL and service delivery by recognising and comprehending the difficulties faced by the frontline healthcare professionals. A high-performing healthcare system is the consequence of the mutually beneficial relationship and exclusive interaction between the two concepts.

Figure 8.3 – Model to promote high QWL and high-quality service delivery



Source: Author's construction based on results of the study

When developing the model depicted in Figure 8.3, the guidebook on best practices in public health (OECD, 2022) was consulted and well as the results of the study. Both sources served as a comprehensive and practical resource. To increase employee QWL and, ultimately, service delivery, it is critical to focus on enhancing the complete healthcare system holistically. To address the issues with service delivery, a top-down strategy is required. The model that emerged from the findings suggest that governments should prioritise upgrading the public healthcare system, which will increase the QWL of healthcare workers and, as a result, high-quality service delivery can be accomplished. The South African government have endeavoured to introduce measures to attain a high performing healthcare system, however the

implementation, monitoring and evaluation of such measures must be improved to overcome challenges effectively.

8.4.4.1 High performing healthcare system

An emphasis on universal healthcare systems to ensuring that all citizens, regardless of socioeconomic background, have equitable access to quality healthcare. The government must prioritise vulnerable and underserved populations to address historical disparities caused by Apartheid regarding access to healthcare. The National Health Insurance (NHI) in South Africa has the potential to play a crucial role in achieving universal healthcare. Ultimately, implementing the NHI in South Africa successfully requires a comprehensive and coordinated approach, involving collaboration between government agencies, healthcare providers and communities. It is essential to address challenges and continually assess and adapt to changes to ensure the achievement of universal healthcare goals.

Reinforcing the primary healthcare facilities and services to provide thorough preventive care at the community level and encouraging community-based health programmes to address local health needs is crucial. NHI can focus on strengthening primary healthcare services, emphasising preventive and promotive measures which can reduce the burden on the healthcare system by addressing health issues at an early stage, preventing the progression of diseases, and reducing the need for costly interventions.

NHI can invest in the development and training of healthcare workers, guaranteeing an adequate and skilled workforce to meet the healthcare needs of the population including addressing shortages in critical healthcare professions, particularly in rural and underprivileged areas. The results also indicated that it may be valuable to implement incentive programmes to attract and retain skilled healthcare workers.

Implementing robust health information systems can improve the collection, analysis and reporting of data can be utilised to identify health trends, allocate resources effectively and make evidence-based decisions for healthcare planning and delivery. Additionally, it is imperative to foster a culture of research and innovation in healthcare to address the unique health challenges faced by the population which will assist to support local research initiatives and collaborate with international partners to drive advancements. We must leverage

technology for telemedicine, electronic health records and health information systems to enhance efficiency and accessibility and implement data analytics to identify health trends and share resources efficiently.

A high performing health care system can foster collaboration between private and public sectors to optimise resource allocation and improve service delivery. Private sector involvement in areas such as infrastructure development, healthcare financing and technology innovation can optimise healthcare resources and increase capacity. Collaboration can help improve service delivery, reduce wait times and enhance overall efficiency in the healthcare system.

It is also critical to encourage community participation in healthcare decision-making processes and to develop widespread health education campaigns to empower individuals and communities to take ownership of their health through vaccination programmes, health screenings, and lifestyle education. It is imperative to standardise healthcare services across the country, ensuring that all citizens receive a consistent level of care, including standardising treatment protocols, quality of care and healthcare infrastructure. Involving communities in the decision-making processes related to healthcare planning and delivery can enhance the success of a healthcare system which can foster a sense of ownership and responsibility among citizens, leading to better health outcomes.

NHI can provide financial protection to all citizens, ensuring that individuals have access to necessary healthcare services without facing financial hardship and can help bridge the gap in healthcare access between different socio-economic groups. NHI can ensure that healthcare services are available to everyone, regardless of financial status or geographic location, by pooling resources and redistributing them based on need. Furthermore, competent financial management will aid in the development of healthcare infrastructure, including the construction and upkeep of hospitals, clinics, and medical facilities. Furthermore, the NHI can put in place comprehensive quality assurance systems and certification requirements for healthcare facilities, guaranteeing that all healthcare providers, public and private, conform to a set of quality standards, increasing trust and confidence in the healthcare system.

The most crucial aspect is government commitment and governance which demonstrate strong political will and commitment to achieving healthcare goals. To do this, it is imperative to

establish transparent and accountable governance structures to monitor and evaluate the performance of the healthcare system.

8.4.4.2 High QWL

The results of the primary and secondary research highlight that implementing strategies to achieve high QWL is a possible solution to achieve high QWL. To ensure that staff levels are always adequate and to prevent burnout and fatigue among healthcare workers, flexible scheduling options to accommodate the diverse needs of healthcare workers must be implemented. However, implementing such a measure is dependent on funding. Similarly, funding also affected the provision of continuous training and education opportunities to enhance the skills and knowledge of healthcare workers. These opportunities can be linked to clear career pathways and opportunities for advancement within the healthcare system.

An emphasis on staff mental health and well-being could be a method for providing access to counselling services for healthcare professionals, and many respondents said that implementing stress management efforts could promote a supportive work environment. Furthermore, a programme linked to recognition and appreciation to recognise and appreciate the contributions of healthcare workers must be tied to a fair and transparent incentive system to recognise exceptional performance.

The physical work environment must ensure strict adherence to safety protocols to protect healthcare workers from occupational hazards. To do this, one can design workspaces with ergonomic considerations to prevent physical strain and injuries. There must also be measures in place to ensure that there are open communication channels to foster open communication between clinical, administrators and support staff. It is also important to have regular team-building activities to promote a collaborative culture and interdisciplinary collaboration.

Implementing technology may support the employees by reducing the administrative burden, keep accurate records and facilitate easy communication. However, when implementing new technology, ensure that all staff attend the training. Additionally, telemedicine may be used to enhance healthcare delivery and provide flexibility to healthcare professionals and might be particularly useful for communities that are difficult to reach in rural areas. Staff want to be involved in decision making, especially regarding processes directly related to their work. For

example, assisting in decisions regarding their leadership may assist in achieving an autonomous workforce within the departments.

Financial well-being is critical to a stress-free life therefore while providing competitive salaries and benefits to healthcare professionals is important, it might be credible to offer financial literacy programmes to help healthcare workers manage their finances effectively. Apart from money, work-life balance may be achieved by flexible work arrangements and family-friendly policies that support healthcare workers. It is important to create feedback platforms to obtain information from healthcare professionals regarding improving work circumstances. Based on the feedback received, leadership must act on feedback to continuously improve work conditions and quality of life of healthcare professionals.

8.4.4.3 High Quality of service delivery

The model depicted in Figure 8.3 indicates that if the healthcare system is operating at maximum potential, then the healthcare workers will attain higher quality of work life because workers are supported and have all the resources that they require to provide high quality of service. One of the key performance indicators of high quality of service in the healthcare sector can be patient-centred care where there is active participation between the patient and healthcare provider regarding decision making and treatment plans which can be achieved by enhancing communication between the healthcare provider and the patient. To achieve this, healthcare professionals must be trained to be culturally competent and sensitive to the diverse needs of patients, one of which is to be spoken to in their mother tongue. Respondents of this study requested to learn the native languages to enable smooth communication.

It is also important to encourage the use of and recording of evidence-based practices and clinical guidelines to achieve clinical excellence. Ongoing training to healthcare professionals must be provided to ensure they are updated on the latest medical advancements which may improve access to and shorten timelines for appointments, tests, and procedures. Additionally, the record keeping will ensure clear communication between healthcare providers and patients regarding diagnoses, treatment plans, and follow-up care. Communication will also be improved if information is shared fostering an information-sharing environment to accelerate quality assurance. To monitor and improve service quality, regular audits and assessments must

be conducted to monitor and improve service quality and healthcare facilities must be encouraged to participate in accreditation programmes to maintain and elevate standards. Patient safety is of utmost importance, with the reports of patients absconding, institutions must establish and enforce strict safety protocols to minimise medical errors and enhance patient safety. There needs to be efficient use of resources, including staffing, equipment, and facilities so that the protocols established are attainable.

Community engagement is also a critical part of ensuring high quality of service delivery. Conducting health education programmes within communities to promote preventive care and early detection will alleviate the pressure on the healthcare system. Similarly, healthcare worker support programmes must be implemented to address the well-being of healthcare professionals, including mental health support and promote work-life balance to prevent burnout among healthcare workers. Additionally, it is important to encourage and support research activities that will encourage innovation in healthcare practices by embracing technological advances in diagnostics, treatment, and administrative procedures. Healthcare policies must encourage and reward high-quality service delivery, as well as allocate money for the development and upkeep of healthcare infrastructure.

Malakoane et al., (2020) explain the creation and implementation of a provincial intervention model to enhance the delivery of public healthcare services in South Africa's Free State province, which aided in monitoring and reporting. The model functioned as a framework for addressing issues such as insufficient resources, poor infrastructure, and a shortage of competent healthcare staff. It entailed enhancing health information systems, boosting primary healthcare services, and encouraging community involvement. Malakoane et al. (2020) suggested that the concept be implemented in other South African provinces to improve the general quality of health care in the country. Aspects from Malakoane’s model were incorporated into the model depicted in Figure 8.3.

8.4.4.4 High performing healthcare system+ High QWL = High Quality of service delivery

While the elements of the model shown in Figure 8.3 can reinforce each other, challenges may arise in achieving a balance among them as highlighted in this study. For example, resource constraints, organisational culture and external factors can impact the ability to simultaneously

optimise all three aspects. However, successful healthcare systems often recognise the interdependence of these elements and work towards creating a synergy that benefits both healthcare workers and patients. A high-performing healthcare system, high quality of work life for healthcare workers, and high quality of service delivery are not necessarily mutually exclusive; in fact, they are often interconnected and can reinforce each other. A well-functioning healthcare system strives to achieve positive outcomes for both patients and healthcare workers. When healthcare workers experience a high quality of work life, which includes factors like reasonable work hours, fair compensation, a supportive work environment and opportunities for professional development, they are more likely to be satisfied and engaged in their roles. Satisfied and engaged healthcare workers are likely to provide better care. Their commitment to their profession and patients can positively impact the overall quality of service delivery. A healthcare system that focuses on delivering high-quality services, including accurate diagnoses, effective treatments, and compassionate care, contributes to positive patient outcomes. When healthcare workers see positive outcomes and satisfied patients, it can boost their morale and job satisfaction. Feeling a sense of purpose and accomplishment in their work enhances the overall quality of their work life. Streamlining processes, reducing administrative burdens, and implementing efficient workflows contribute to a better work life for healthcare professionals. Efficient and well-organised healthcare systems are better positioned to deliver timely and effective services, which, in turn, can improve patient outcomes. Supportive communication and collaboration within healthcare teams contribute to a positive work environment. Effective communication and collaboration among healthcare professionals lead to coordinated and integrated care, ultimately benefiting patients.

8.5 Recommendations from this research study

According to Almalki et al. (2012), employees in a variety of industries perform better on the job and are more committed when they feel valued, wanted, and welcomed. The same applies to healthcare organisations. To recruit new employees and keep a productive staff, a high QWL is necessary. Health organisations are therefore looking for strategies to overcome challenges with hiring and retaining staff by reaching a high QWL. Focusing on enhancing QWL to raise employee happiness and satisfaction can have numerous benefits for the worker, the organisation, and patients. These include enhancing the organisation's commitment to QWL,

enhancing the standard of patient care, and raising both employee and organisational productivity.

Additionally, we cannot look at the health sector in isolation if we want to see any progress. As discussed in the secondary research, the sustainable development goals (SDG's) set in Agenda 2030, all SDG's feed into one another and there should be a multisectoral approach to fixing our problems. Education, sanitation, energy are all vital parts of seeing change in the healthcare sector. It is evident in the frequent calls for more training as education is the foundation on which we can implement change.

Training

- Focus on more frequent training that are work related and not general. Training that facilitates career advancement will inspire frontline workers to attend in the hope of pay progression. Continuous leadership training is also imperative as leaders must be up to date with all new developments in the sector.
- Offer opportunities for job rotation which will give staff an opportunity to expand their knowledge into other areas of expertise. If it is voluntary, staff will feel like they are a part of the decision and will appreciate the opportunity to break monotony.
- Encourage healthcare workers to use existing technology to learn local languages to make communication easier.

Collaborate

- Collaborate with Schools of Hospitality for training staff. The hospitality sector is known for high service quality levels and providing hospitality training to hospital staff may equip them with soft skills required to make the hospital stay more pleasant.
- It will be beneficial for both the sectors resulting in better outcomes for the patients as well as increase job satisfaction for the staff.
- Hospital staff will learn communication skills and customer service skills that is synonymous with great hospitality.
- The project has been tested by Christiana Care Health System (CCHS) and University of Delaware which yielded good results (Poorani, et al., 2023).

Resources

- A lack of resources was the foundation of majority of the challenges which included lengthy waiting times, poor hygiene and poor infection control measures. Ensuring that there is enough resources will help alleviate challenges and increase the quality-of-service delivered and QWL.
- When planning service quality improvement programmes, ensure proper planning. Be aware of the resources that are required and ensure that there are enough resources to implement the programme because it is very difficult to implement programmes with no resources.

Staffing

- Staff shortages can be addressed firstly, by implementing recruitment strategies that put the right people in suitable positions and secondly by introducing technological help such as computer systems to streamline work processes. A work study aimed at streamlining work processes must be done.
- Addressing the staff shortages will help alleviate problems of lengthy waiting times, cross infections and litigation.
- Recruitment of leaders must be transparent and opportunities for leadership positions must be advertised internally first to give internal applicant equal opportunities.
- Proper leadership will ensure that the appropriate financial requests are made, allowing adequate resources to be purchased to alleviate the problem of scarcity. Leaders are accountable for distributing resources efficiently and prioritising the most pressing demands. They may make informed decisions on which resources are required to overcome the highlighted obstacles through rigorous analysis and prioritisation. A strong leader ensures that resources are used responsibly. Leaders create trust with donors and stakeholders by being upfront about how funds will be utilised and the expected outcomes. This trust is critical for maintaining continuing support. Effective leaders are adaptive and receptive to new ideas. In times of scarcity, they can look for new funding options and alliances. Effective leaders are adaptive and receptive to new ideas. When resources are scarce, they can look into creative funding possibilities, partnerships, or other techniques to solving the problem. This versatility is critical for finding answers even in difficult situations. Setting up processes for monitoring and analysing the impact of resource utilisation is part of leadership. This enables leaders

to demonstrate the efficacy of their strategies, providing proof to justify continued funding and support.

- According to the findings of this study, the healthcare professional are subjected to longer working hours and higher workloads. Therefore, institutions must review the leave and remuneration policies as there was a plea for additional leave and higher salary.

Technology

- To address the problem of poor record keeping, implement a centralised tracking system where all hospitals work on the same data base. Patient records are kept centrally, enabling fast treatment. Related projects are currently implemented in India, Canada and Singapore.

8.6 Limitations

The initial goal of this project was to examine the QWL at the five central hospitals identified in the NHQIP training strategy. Two hospitals did not give permission to perform research, and one facility was included twice. Therefore, the sample for the study was made up of two hospitals located in two different South African provinces. The findings of the study are only applicable to these two institutions; they cannot be generalised because issues are experienced differently across South Africa. Additionally, because only frontline employees answered the questions, other employees who perform background tasks might have a different perspective on QWL.

8.7 Recommendations for future areas of research

It can be recommended that the current study be replicated at the other central hospitals first in all nine provinces. Then tertiary, district and regional hospitals must be targeted. Thereafter, the research must be repeated at primary care facilities such as community health centres, clinics and Emergency medical services (EMS) stations which is perceived to be beneficial as further research will give a holistic view of how the challenges are perceived by the different groups of healthcare professionals in the different provinces and may assist in raising the standard of quality of work life and service delivery in healthcare across SA.

Possibility for further research:

- Hospitals to hospitality model to collaborate with Schools of Hospitality in SA for training staff. Employees in the hotel industry shared many of the same critical skillsets that were identified for medical staff. Skills include compassion, understanding, responsibility, being aware, paying attention, and so forth (Zsarnoczky-Dulhazi, Zsarnoczky, Kopper, Karpati, Molnar, Adol & David, 2023). While it is possible to acquire digital skills through training, it is vital to keep in mind that "soft skills" like empathy, responsibility, dependability and decisiveness may not always be enhanced by formal training courses. Hospitality is considered as a culture that organises and enables service employees to deliver great customer experiences, making the hotel business leaders in service (Pizam, 2020).

- The synergies between hospitality and healthcare sectors should be harnessed to foster improvement and create opportunities in both sectors. The hospitals can benefit from training based on best practices in the hospitality sector, while the hospitality industry can benefit from an influx of medical or health tourism. Due to the revenue that provision of training, delivering quality healthcare and tourism create, both industries will profit creating a mutually beneficial relationship between the hospitality and hospital sectors. Employees in the hotel industry shared many of the same critical skillsets that were identified for medical staff. Skills include compassion, understanding, responsibility, being aware, paying attention, and so forth (Zsarnoczky-Dulhazi, Zsarnoczky, Kopper, Karpati, Molnar, Adol & David, 2023). While it is possible to acquire digital skills through training, it is vital to keep in mind that "soft skills" like empathy, responsibility, dependability and decisiveness may not always be enhanced by formal training courses. Hospitality is considered as a culture that organises and enables service employees to deliver great customer experiences, making the hotel business leaders in service (Pizam, 2020). The hospital sector can benefit from more research in this area.

- A work study aimed at streamlining work processes
- Research into implementing technology to maintain a central database for patient records.
- Improving hospital design for better work processes. Hospital design plays a crucial role in improving work processes and enhancing overall efficiency. Hospital design plays a

crucial role in improving work processes and enhancing overall efficiency. Research into a more patient-centered design to provide more privacy and reduce the spread of infections and to enhance patient comfort. Creating a welcoming and comfortable space for patients and their families. In addition, research design in the hospital layout to have a logical and efficient flow, minimising the need for staff and patients to backtrack or navigate confusing hallways, ensuring that place related departments and services in close proximity to each other, reducing the time spent moving between different areas. Also, research into comfortable and ergonomically designed workspaces for healthcare professionals to reduce fatigue and increase efficiency and creating areas that facilitate communication and collaboration among healthcare teams.

8.8 Conclusion

The eight chapters in this thesis took the reader on a journey from the conceptualisation of the study's goal in Chapter One, culminating in the accomplishment of its primary goals in Chapter Eight. The logical conclusion of the research study was presented in this final chapter. It was framed around themes that emerged from the study's objectives and included recommendations based on that aim as well as suggestions for additional research. This conversation was in keeping with the research study's idea to create a model to support high-quality work life in order to guarantee the delivery of high-quality services. The aim and objectives of the study was achieved, through a meticulous examination of the study’s key components. The researcher sought not only to encapsulate the study's significance but also to inspire further exploration and inquiry into the relevant research areas. This chapter is not merely an endpoint; it is a springboard for future scholarship and a testament to the enduring nature of the pursuit of knowledge.

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APPENDICES

Appendix 1: Questionnaire

Thank you for taking the time to complete the survey below.

The purpose of this questionnaire is to evaluate your quality of work life (QWL) as healthcare professionals who work in the frontline and to assess how QWL affects your ability to provide high quality of service delivery. To do this, we will ask a series of questions so that we can understand a bit about you as an individual. From this, we will get your perspective on high QWL and high quality of service delivery. Please answer each question as honestly as you can and be assured that your answers are anonymous. By completing the questionnaire, you are consenting to participate in the research but please note that participation is voluntary. It should take you between 30-40 minutes to complete the questionnaire. All the information collected will be kept confidential and not be linked to you as no personal details will be collected.

We hope to use these responses to propose a model to promote a high quality of work life for you and to empower you to provide a high quality of service during your daily activities. Please answer all questions.

Section A - Profile

Tell me a bit about yourself.

1. Please state your age.

20-30	31-40	41-50	51-65

2. Please select the gender you identify with.

Male	Female	Other

3. Which cultural group do identify with? If other, please specify.

Black	White	Indian	Coloured	Other

4. How long have you been employed at your current place of employment?

Under 1 year	3-5 years	6-10 years	11-15 years	16 years-20 years	More than 20 years

5. What are the best aspects of your current job?

6. Which department do your work at?

Admissions	Ward	Nursing	Pharmacy	Other Please Specify

7. How long have you spent in your previous place of employment?

Under 1 year	1-5 years	6-10 years	11-15 years	16 years-20 years	More than 20 years

8. Why did you leave your previous place of employment?

9. In total, how long have you worked as a frontline healthcare professional?

Under 1 year	1-5 years	6-10 years	11-15 years	16 years-20years	More than20 years

10. What is your level of seniority?

Executive Management	Senior Management	Middle Management	Junior Management	Other *Please specify*

11. How long have you been working in your current position?

Under 1 year	1-5 years	6-10 years	11-15 years	16 years-20 years	More than 20 years

12. Which region is your current place of work located?

Guateng	
KwaZulu-Natal	

Section B – Training and skills

13. Have you received training based on quality management in healthcare?

Yes	No

14. If yes, did the training help you improve your knowledge and skillset?

Yes	No

15. Which skills did you improve?

16. Which skills do you still need to improve on?

17. Are you aware of any training programs available to you to improve your knowledge skillset that will improve your ability to conduct daily tasks?

Yes	No

18. On a scale of 1-5 rate the importance of the following skills for frontline healthcare professionals based on your level of seniority.

	1 Not important at all	2 Slightly important	3 Important	4 Fairly important	5 Extremely Important
a) Technical skills					
b) Digitally savvy					
c) Flexibility					
d) Confidence					
e) Empathy & Patience					
f) Communication					
g) Team player					
h) Active learner					
i) High work ethic					

j) Ability to manage stress					
k) Positive attitude					
l) Receptive attitude					
m) Assertiveness					
n) Attentive					
o) Adaptability					
p) Passion and commitment for your job					
q) Self-motivated					
r) Accountability					
s) Responsibility					
t) Nonjudgmental					
u) Active listener					
v) Reassuring approach					
w) Reliable					
x) Observant					
y) Professional					
z) Other (Specify)					

19. Select which of these skills can be upgraded with training?

	Select
a) Technical skills	
b) Digitally savvy	
c) Flexibility	
d) Confidence	
e) Empathy & Patience	
f) Communication	
g) Team player	
h) Active learner	

i) High work ethic	
j) Ability to manage stress	
k) Positive attitude	
l) Receptive attitude	
m) Assertiveness	
n) Attentive	
o) Adaptability	
p) Passion and commitment for your job	
q) Self-motivated	
r) Accountability	
s) Responsibility	
t) Nonjudgmental	
u) Active listener	
v) Reassuring approach	
w) Reliable	
x) Observant	
y) Professional	
z) Other (Specify)	

20. If you have received training, recall the previous training sessions that you have completed, select the skills you improved after the training.

	Select
a) Technical skills	
b) Digitally savvy	
c) Flexibility	
d) Confidence	
e) Empathy & Patience	
f) Communication	

g) Team player	
h) Active learner	
i) High work ethic	
j) Ability to manage stress	
k) Positive attitude	
l) Receptive attitude	
m) Assertiveness	
n) Attentive	
o) Adaptability	
p) Passion for your job and commitment	
q) Self-motivated	
r) Accountability	
s) Responsibility	
t) Nonjudgmental	
u) Active listener	
v) Reassuring approach	
w) Reliable	
x) Observant	
y) Professional	
z) Other (Specify)	

21. Has the training improved your quality of work life?

YES 20.1 Elaborate on how the training has improved your QWL?	NO 20.1 What could have been done better to make the training more meaningful to improving your QWL

22. On a scale of 1-5, do you agree or disagree with the following statements based on training opportunities at your current work organisation.

	1 Strongly Disagree	2 Disagree	3 Undecided	4 Agree	5 Strongly agree
a) There are training opportunities available for me to improve my professional skills.					
b) I receive support to attend the training sessions					
c) My accomplishments are recognised by my team.					
d) My accomplishments are recognised by my seniors.					
e) I am committed to upskilling myself.					

Section C – Quality of Work life

23. Whose responsibility is it to drive service quality improvement projects?

Executive Management	All Managers	Junior Managers at ward level	All frontline workers	Other *Please specify*

24. On a scale of 1-5, do you agree or disagree with the following statements based on your team and your current work environment.

	1 Strongly Disagree	2 Disagree	3 Undecided	4 Agree	5 Strongly agree
a) There is sufficient communication from upper management within my organisation.					

b) There is insufficient communication from upper management within the organisation.					
c) There is sufficient communication at department level.					
d) We have strong interdepartmental communication.					
e) We do not have strong interdepartmental communication.					
f) There is great teamwork throughout my organisation including all departments.					
g) There is great teamwork within my department.					
h) I work in an open honest environment.					
i) I am proud to work at my workplace.					
j) I work in a blame free environment.					
k) There is a strong sense of ownership by all staff.					
l) There is a strong sense of accountability of senior staff members.					
m) There is a strong sense of responsibility of all staff members.					
n) My team and I are open to new idea and change.					
o) My team are committed to their jobs.					

25. On a scale of 1-5, do you agree or disagree with the following statements based on implementation of new plans for service quality improvement at your current work organisation.

	1 Strongly Disagree	2 Disagree	3 Undecided	4 Agree	5 Strongly agree
a) My organisation does not have the capacity to implement service quality improvements plan					

b) The organisational culture and supports an environment that can deliver high quality of service.					
c) There is no incentive to implement service quality improvements plans.					
d) The resources required to implement service quality improvements are available.					
e) I believe a higher quality of work life will improve my service delivery.					
f) There are key individuals within my organisation who are resistant to change.					
g) My team are committed to improving service quality.					

26. On a scale of 1-5, do you agree or disagree with the following statements based on your daily work activities.

	1 Strongly Disagree	2 Disagree	3 Undecided	4 Agree	5 Strongly agree
a) I understand how my work contributes attaining the goals my organisation.					
b) My workplace is clean					
c) I have access to clean toilets.					
d) My workplace is unhygienic and dirty.					
e) The toilets at my workplace are dirty.					
f) There is a place for me to rest during shift.					
g) I have a place to eat my food during shift.					
h) I have adequate time allocated for a break.					

i) I get adequate support from my team to conduct my daily duties					
j) I get adequate support from my seniors to conduct my daily duties					
k) My workload is too heavy.					
l) I am satisfied with my job.					
m) I am able to make patient care decisions.					
n) I perform many task that is not within my job description.					
o) I have enough time to complete my job efficiently.					
p) I have enough resources to complete my job efficiently.					
q) I lack the resources I require complete my work efficiently.					

27. The following statements relate to you work-family life balance. On a scale of 1-5, do you agree or disagree?

	1 Strongly Disagree	2 Disagree	3 Undecided	4 Agree	5 Strongly agree
a) I am able to maintain a balance between the needs of my family and my work.					
b) I struggle to find a balance between work and family.					
c) My children have good care while I am at work.					
d) My elderly family members have good care while I am at work.					
e) I have energy to partake in family activities after work.					

f) I am exhausted when I get home so I have no energy to partake in family activities after work.					
g) The shift work impacts my life negatively.					
h) The shift work impacts my life positively.					
i) The leave allowances are enough to meet my family needs.					
j) The leave allowances do not meet my needs adequately.					
k) I am able to stay with my children when they are sick.					
l) My family are proud of my job.					
m) I am proud of my contribution to my community.					
n) I have the time to participate in community projects.					
o) I am proud of my job.					
p) I am looking to leave the healthcare sector.					
q) The problems experienced by the healthcare sector cannot be repaired.					

28. What motivates you the most?

	1 Not important at all	2 Slightly important	3 Important	4 Fairly important	5 Extremely Important
a) Salary increase					
b) Promotion					

c) Additional Leave					
d) Motivational talk					
e) Recognition					

29. Which of the following factors are most important when driving service quality improvement projects?

a) Timing	
b) Support from management	
c) Quick implementation	
d) Funding	
e) Communication	
f) Transparency	
g) Availability of resources required	
h) Team involvement	

30. Which of the following have you experienced at your organisation?

	If yes, please elaborate on how this impacted on your service delivery	If yes, please elaborate on how this impacted on your quality of work life
a) Lengthy waiting time		
b) Staff shortages		
c) Poor hygiene		

d) Poor infection control measures		
e) Shortage of resources		
f) Poor recordkeeping		
g) Adverse events		
h) Increased litigation because of avoidable errors		
i) Unequal distribution of resources		
j) Management and leadership crisis		
k) Increased disease burden		
l) Large numbers of patients beyond the capacity of your organisation		

m) Slow progress in restructuring the healthcare system including strategies adopted by government to improve the quality of healthcare delivery.		
n) Water shortages on a regular basis		
o) Load Shedding		

31. Would you like to highlight any suggestion to improve your QWL?

Appendix 2: Ethics Certificate

Cape Peninsula University of Technology

P.O. Box 1906 |Bellville 7535
Symphony Road Bellville 7535
South Africa
Tel: +27 21 4603291
Email: fbmsethics@cput.ac.za

Office of the Chairperson Research Ethics Committee	**FACULTY: BUSINESS AND MANAGEMENT SCIENCES**

The Faculty's Research Ethics Committee (FREC) on **16 November 2021**, ethics **APPROVAL** was granted to **Prof Visvanathan Naicker** for a research activity at the Cape Peninsula University of Technology.

Title of project:	**National Health Quality Improvement Plan in South Africa [NHQIP]** Researcher (s): Prof V Naicker/ Prof R Tengeh/ Prof R Rampersad

Decision: APPROVED

Signed: Chairperson: Research Ethics Committee	**17 November 2021** **Date**

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the CPUT Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study requires that the researcher stops the study and immediately informs the chairperson of the relevant Faculty Ethics Committee.
3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing accompanied by a progress report.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines, and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, notably compliance with the Bill of Rights as provided for in the Constitution of the Republic of South Africa, 1996 (the Constitution) and where applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003 and/or other legislations that is relevant.

6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.

7. No field work activities may continue after two (2) years for Masters and Doctorate research project from the date of issue of the Ethics Certificate. Submission of a completed research ethics progress report (REC 6) will constitute an application for renewal of Ethics Research Committee approval.

Clearance Certificate No | 2021_FBMSREC 078

Appendix 3: Data Management Plan

Creator: Michaelle Deonarain

Affiliation: Cape Peninsula University of Technology

Template: Cape Peninsula University of Technology

Last modified: 10-10-2022

Topic: The quality of work life of frontline healthcare workers that affect service delivery at selected hospitals in South Africa.

Health security - Data Management Plan

DATA COLLECTION

What data will you collect/create?

I will collect qualitative and quantitative data from frontline healthcare workers.

How will the data be collected or created?

The data will be collected using an online questionnaire.

DATA DOCUMENTATION AND METADATA

What documentation and metadata will accompany your dataset?

Statistics based on previous studies will be highlighted. Reference will be made to Healthcare Quality and Patient Safety Training and Education Implementation Plan as well as policies set out by the National Department of Health. Various scholarly journals will be referenced to research and discover all information related to the objectives of the study over the past 10 years.

ETHICS AND LEGAL COMPLIANCE

How will you manage any ethical issues pertaining to data?

1. I will ensure that the research project adheres to the values and principles expressed in the CPUT Policy on Research Ethics

2. I will conduct the study according to the methods and procedures set out in the approved application.
3. I will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines, and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, notably compliance with the Bill of Rights as provided for in the Constitution of the Republic of South Africa, 1996 (the Constitution) and where applicable: Protection of Personal Information Act, no 4 of 2013: Children's act no 38 of 2002 and the National Health Act, no 61 of 2003 and/or other legislations that is relevant.
4. All fieldwork will be conducted 2023.
5. No personal details of respondents will be collected to ensure anonymity.

How will you manage copyright and Intellectual Property Rights (IPR) issues? All work from other sources used in the dissertation will be cited using the CPUT Harvard Referencing method. Both in-text and a full list of references will be provided.

DATA STORAGE AND BACKUP

How will you store and back up your data during the research?

The data will be stored on the CPUT cloud and an external hard drive.

How will you manage access and security?

Data will be protected using passwords. The university has an ongoing security program that protects university owned devices. I am using university owned devices to conduct my research.

DATA SELECTION AND PRESERVATION

Explain which data should be retained, shared, and /or preserved?

All data that relate to the aim and objectives of the study should be retained. No personal details of respondents will be shared and these will be deleted if collected in error.

DATA SHARING

How will data be shared?

Data will be shared using tables and graphs in the dissertation. Findings will be discussed. The full data set will not be shared with the public**.** Data set will be shared with the statistician, supervisor and marker.

Are any restrictions on data sharing required?

There is no need to share any data as this is research is done for academic purpose in order to attain a qualification.

RESPONSIBILITIES AND RESOURCES

Who will be responsible for data management?

Primarily, I will collect the data. A statistician, my supervisor, and the marker will have access to the data.

What resources will you require to deliver your plan?

Internet connection and a laptop

PERSONAL, SENSITIVE AND IDENTIFIABLE HUMAN RESEARCH DATA

Will you be collecting personal information? No

List all the types of personal/sensitive/identifiable data you will be collecting. Age, gender, ethnic group, years of employment, perceptions of current and previous place of employment, team members, managements, challenges and quality of work life experienced.

Conduct a benefit/risk analysis to ensure that the benefit of collecting such data outweighs the risk and then motivate why you need to collect such information.

Quality of work life is an integral part of how of healthcare workers respond to daily challenges during their daily service delivery encounters. This study will identify challenges that affect the quality of work life and service delivery capabilities of frontline healthcare workers. Access to high quality healthcare should be a priority for all South Africans and

therefore it is important to identify challenges an implement measures to overcome these challenges. There is no risk to collecting the data from the targeted population and therefore there are only benefits for both givers and receivers of service in the healthcare system of South Africa.

Confidentiality, anonymity, and privacy of human participants.

Confidentiality and anonymity of respondents is guaranteed. No names or personal details are collected in the questionnaire.

What happens to the information if a participant withdraws from a study?

The responses of the participant who chose to withdraw will not be captured or stored. The data will not be used when collating the information during the analysis and discussions.

After completion of the research, will the information be used for anything else in the future?

Yes, the information will be used as this research is commissioned by the National Department of Health

Will study participants/groups etc. receive feedback before disseminating the results of the research?

No

Outline your informed consent process and details of the data management plan.

CPUT has received consent from the National Department of Health to conduct the research. The student has submitted a proposal to CPUT to conduct research. The student will contact the respective hospitals that form part of the targeted sample to attain permission to administer questionnaires to their frontline healthcare workers. Once permission is received, the questionnaire will be disseminated.

Appendix 4: Permission letters

GAUTENG PROVINCE
REPUBLIC OF SOUTH AFRICA

MEDICAL ADVISORY COMMITTEE

CHRIS HANI BARAGWANATH ACADEMIC HOSPITAL

PERMISSION TO CONDUCT RESEARCH

Date: 20th October 2022

TITLE OF PROJECT:

The quality of work life of frontline healthcare workers that affect service delivery at selected hospitals in South Africa.

UNIVERSITY: Cape Peninsula University of Technology

Principal Investigator: Ms M Deonarain

Department: GENERAL

Supervisor : Prof Renitha Rampersad

NHRD Number: GP_202210_023

Permission Head Department (where research conducted):

The Medical Advisory Committee recommends that the said research be conducted at Chris Hani Baragwanath Academic Hospital. The CEO / management of Chris Hani Baragwanath Academic Hospital is accordingly informed and the study is subject to:-

- **Permission having been granted by the Committee for Research on Human Subjects of the University of the Cape Peninsula University of Technology.**
- The Hospital will not incur extra costs as a result of the research being conducted on its patients within the hospital
- The MAC will be informed of any serious adverse events as soon as they occur
- Permission is granted for the duration of the Ethics Committee Approval.

Recommended
(On behalf of the MAC)
Date: 20/10/2022

Approved/~~Not Approved~~
Hospital Management
Date: 21/10/2022

KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

INKOSI ALBERT LUTHULI CENTRAL HOSPITAL
Private Bag X03, Mayville, 4058
800 Vusi Mzimela (Bellair) Road, Mayville,4091
Tel: 031 240 1059 Fax: 031 240 1005 Email: Ursula.john@ialch.co.za

DIRECTORATE:
OFFICE OF THE MEDICAL MANAGER

Reference: CPUT
Enquiries: Medical Management

2 November 2022

Ms M Deonarain
Cape Peninsula
University of Technology

Dear Ms Deonarain

RE: PERMISSION TO CONDUCT RESEARCH AT IALCH

I have pleasure in informing you that permission has been granted to you by the Medical Manager to conduct research on: **National Health Quality Improvement Plan in South Africa (NHQIP).**

Kindly take note of the following information before you continue:

1. Please ensure that you adhere to all the policies, procedures, protocols and guidelines of the Department of Health with regards to this research.
2. This research will only commence once this office has received confirmation from the Provincial Health Research Committee in the KZN Department of Health.
3. Kindly ensure that this office is informed before you commence your research.
4. The hospital will not provide any resources for this research.
5. You will be expected to provide feedback once your research is complete to the Medical Manager.

Yours faithfully

.....

Dr A Harrichandparsad
Clinical Care Manager

KWAZULU-NATAL PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

Physical Address 800 Vusi Mzimela Road, Mayville - 4058
Postal Address: Private bag X03 Mayville – 4058
Tel: 031 240 1124 Fax: 031 240 1005 Email: linda.mtshali@ialch.co.za
www.kznhealth.gov.za

DIRECTORATE:
OFFICE OF THE MEDICAL MANAGER
INKOSI ALBERT LUTHULI CENTRAL HOSPITAL

Reference: CPUT
Enquiries: Dr. A. Harrichandparsad

2 November 2022

Ms M Deonarain – (223232165)
Cape Peninsula
University of Technology

Dear Ms Chetty

Re: Approved Research: Ref No: CPUT – 223232165: National Health Quality Improvement Plan in South Africa (NHQIP).

As per the policy of the Provincial Health Research Committee (PHRC), you are hereby granted permission to conduct the above-mentioned research once all relevant documentation has been submitted to PHRC inclusive of Full Ethical Approval.

Kindly note the following.

1. The research should adhere to all policies, procedures, protocols and guidelines of the KwaZulu-Natal Department of Health.
2. Research will only commence once the PHRC has granted approval to the researcher.
3. The researcher must ensure that the Medical Manager is informed before the commencement of the research by means of the approval letter by the chairperson of the PHRC.
4. The Medical Manager expects to be provided feedback on the findings of the research.
5. Kindly submit your research to:

- The application is an online process by logging on to: HTTP://NHRD.HEALTH.GOV.ZA and follow the steps as indicated on the Provincial Health Research page.

Yours faithfully

.....

Dr. A. Harrichandparsad
Clinical Care Manager
Office of the Medical Manager
IALCH

DIRECTOR GENERAL
HEALTH
REPUBLIC OF SOUTH AFRICA
PRETORIA
Private Bag X828, PRETORIA, 0001, Dr AB Xuma Building, 1112 Voortrekker Rd, Pretoria Townlands 351-JR, Pretoria, 0187, Tel (012) 395 8000
CAPE TOWN
P.O. Box 3875, CAPE TOWN, 8000, 103 Parliament Towers, Room 615, Plein Street, CAPE TOWN, 8000 Tel (021) 461 2040 Fax (021) 461 6864

To Whom it may concern

Letter of Support: National Quality Health Implementation Plan – Research Project to be conducted in the nine provinces of South Africa

The National Department of Health supports the conduct of following nine studies that will be conducted by Masters and Doctor students based at Cape Peninsula University of Technology under the leadership of Professor Visvanathan Naicker

1. A study of Healthcare Quality and Patient safety capacity building interventions in South Africa. A national sectoral analysis.
2. Bridging the Competency Gap in Quality Patient Care Amongst Clinicians and Clinical Managers.
3. Translation of knowledge during the training into tangible improvements in the quality of care provided for Emergency Medical Services.
4. Towards High Reliability Healthcare in RSA: A Study of capacity building of non-clinical managers and leaders in South Africa.
5. Translation of knowledge from the Healthcare Quality Management training into tangible improvements in healthcare social work services.
6. The lack of strategic management of health services and its effect on quality health care.
7. A "people-centred approach" to realising health care by facilitating patient, and community participation in health attainment.
8. The effect of critical staff shortages, inadequate training, and poor attitudes of staff on health care.
9. Delivering Emergency Medical Services in resource constrained circumstances

The benefit derived from this research will inform the health sector on where and what the problematic areas are - pre and post the training around the various topics the 9 students have chosen in quality healthcare. Evidence from this research and training will further encourage a strong stewardship and leadership for high quality universal health coverage for all South Africans

DR N CRISP
ACTING DIRECTOR-GENERAL: HEALTH
DATE: 15/11/2021

Appendix 5: Nonparametric Correlations

			Personal Characteristics	Attitude towards work & people	Technical Skills	Accomplishments being recognised and training opportunities	Support for training	Attitude towards team and teamwork	Teamwork & communication	Interdepartmental communication	Clean work environment	Support from team and seniors	Place for relaxing	Work-life Balance	Shift work	Energy for home duties	Motivation for work
Spearman's rho	Personal Characteristics	Correlation Coefficient	1.000	.730**	.449**	.000	-.054	.003	.013	.134*	.160**	.094	.076	.122*	.073	.033	.160**
		Sig. (2-tailed)	.	<.001	<.001	.997	.334	.957	.819	.016	.004	.093	.176	.029	.199	.550	.004
		N	322	322	322	320	318	322	322	322	322	322	322	322	308	322	322
	Attitude towards work & people	Correlation Coefficient	.730**	1.000	.447**	-.023	-.064	-.082	-.009	.118*	.073	.041	.084	.094	-.060	.013	.196**
		Sig. (2-tailed)	<.001	.	<.001	.687	.254	.144	.866	.035	.190	.467	.133	.094	.292	.814	<.001
		N	322	322	322	320	318	322	322	322	322	322	322	322	308	322	322
	Technical Skills	Correlation Coefficient	.449**	.447**	1.000	.122*	-.020	.087	.058	.175**	.122*	.156**	.189**	.052	.044	.052	.103
		Sig. (2-tailed)	<.001	<.001	.	.029	.726	.117	.296	.002	.029	.005	<.001	.357	.438	.355	.064
		N	322	322	322	320	318	322	322	322	322	322	322	322	308	322	322
	Accomplishments being recognised and training opportunities	Correlation Coefficient	.000	-.023	.122*	1.000	.444**	.269**	.268**	.239**	.176**	.344**	.160**	.145**	.137*	.167**	.009
		Sig. (2-tailed)	.997	.687	.029	.	<.001	<.001	<.001	<.001	.002	<.001	.004	.009	.016	.003	.875
		N	320	320	320	320	318	320	320	320	320	320	320	320	306	320	320
	Support for training	Correlation Coefficient	-.054	-.064	-.020	.444**	1.000	.241**	.238**	.140*	.046	.177**	-.059	.085	.088	.019	.023
		Sig. (2-tailed)	.334	.254	.726	<.001	.	<.001	<.001	.012	.410	.001	.291	.131	.125	.732	.686
		N	318	318	318	318	318	318	318	318	318	318	318	318	304	318	318
	Attitude towards team and teamwork	Correlation Coefficient	.003	-.082	.087	.269**	.241**	1.000	.423**	.263**	.101	.526**	.163**	.235**	.118*	.158**	.053
		Sig. (2-tailed)	.957	.144	.117	<.001	<.001	.	<.001	<.001	.069	<.001	.003	<.001	.038	.005	.341
		N	322	322	322	320	318	322	322	322	322	322	322	322	308	322	322

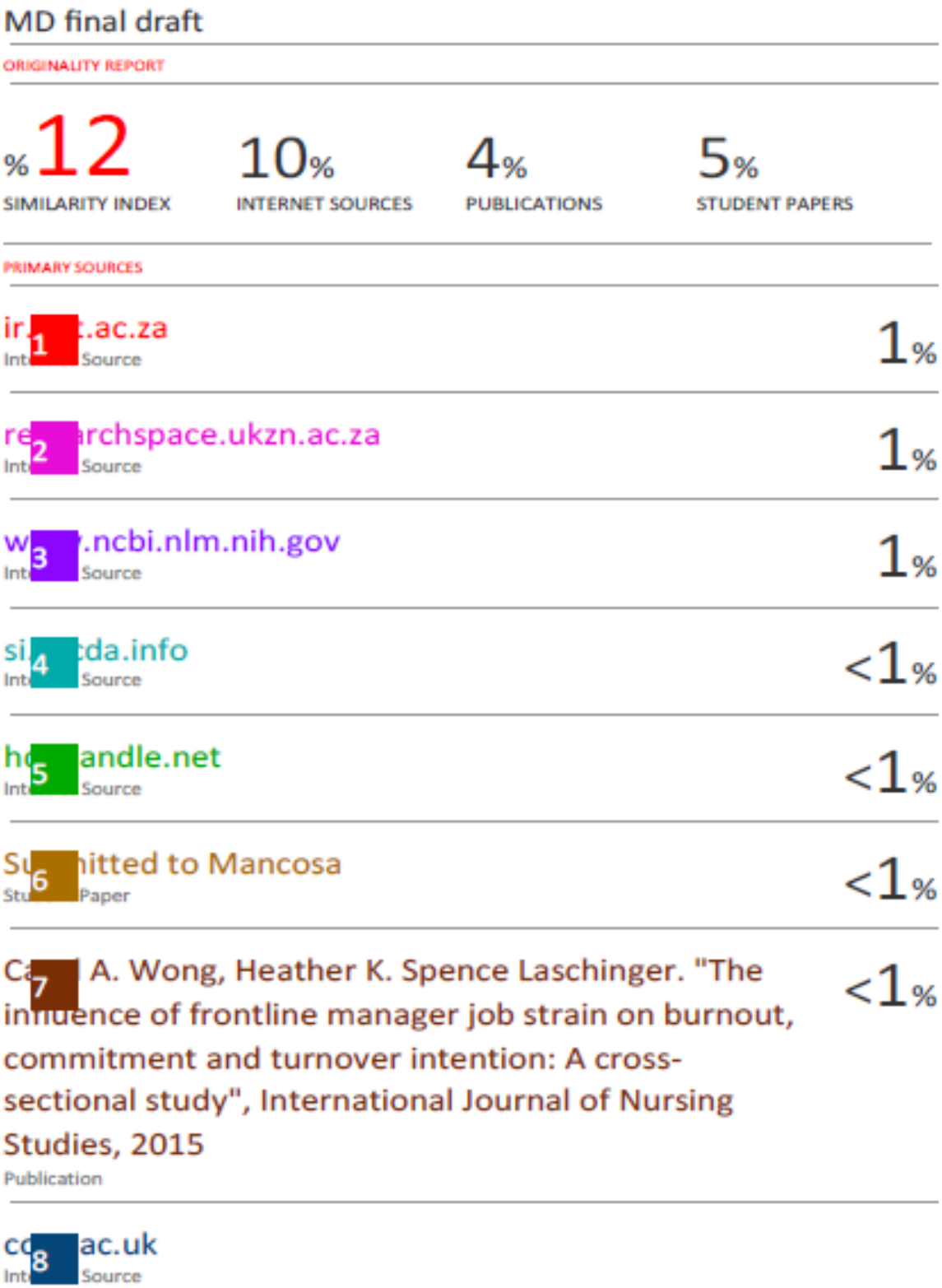
		Personal Characteristics	Attitude towards work & people	Technical Skills	Accomplishments being recognised and training opportunities	Support for training	Attitude towards team and team work	Teamwork & communication	Interdepartmental communication	Clean work environment	Support from team and seniors	Place for relaxing	Work-life Balance	Shift work	Energy for home duties	Motivation for work
Teamwork & communication	Correlation Coefficient	.013	-.009	.058	.268**	.238**	.423**	1.000	.434**	.056	.391**	.155**	.215**	.116*	.215**	-.052
	Sig. (2-tailed)	.819	.866	.296	<.001	<.001	<.001	.	<.001	.320	<.001	.005	<.001	.042	<.001	.354
	N	322	322	322	320	318	322	322	322	322	322	322	322	308	322	322
Interdepartmental communication	Correlation Coefficient	.134*	.118*	.175**	.239**	.140*	.263**	.434**	1.000	.125*	.224**	.153**	.121*	.098	.055	-.081
	Sig. (2-tailed)	.016	.035	.002	<.001	.012	<.001	<.001	.	.025	<.001	.006	.030	.085	.327	.146
	N	322	322	322	320	318	322	322	322	322	322	322	322	308	322	322
Clean work environment	Correlation Coefficient	.160**	.073	.122*	.176**	.046	.101	.056	.125*	1.000	.343**	.423**	.199**	.242**	.106	.136*
	Sig. (2-tailed)	.004	.190	.029	.002	.410	.069	.320	.025	.	<.001	<.001	<.001	<.001	.056	.014
	N	322	322	322	320	318	322	322	322	322	322	322	322	308	322	322
Support from team and seniors	Correlation Coefficient	.094	.041	.156**	.344**	.177**	.526**	.391**	.224**	.343**	1.000	.418**	.463**	.215**	.299**	.057
	Sig. (2-tailed)	.093	.467	.005	<.001	.001	<.001	<.001	<.001	<.001	.	<.001	<.001	<.001	<.001	.312
	N	322	322	322	320	318	322	322	322	322	322	322	322	308	322	322
Place for relaxing	Correlation Coefficient	.076	.084	.189**	.160**	-.059	.163**	.155**	.153**	.423**	.418**	1.000	.404**	.101	.237**	.074
	Sig. (2-tailed)	.176	.133	<.001	.004	.291	.003	.005	.006	<.001	<.001	.	<.001	.076	<.001	.184
	N	322	322	322	320	318	322	322	322	322	322	322	322	308	322	322
Work-life Balance	Correlation Coefficient	.122*	.094	.052	.145**	.085	.235**	.215**	.121*	.199**	.463**	.404**	1.000	.265**	.423**	.046
	Sig. (2-tailed)	.029	.094	.357	.009	.131	<.001	<.001	.030	<.001	<.001	<.001	.	<.001	<.001	.407
	N	322	322	322	320	318	322	322	322	322	322	322	322	308	322	322

		Personal Characteristics	Attitude towards work & people	Technical Skills	Accomplishments being recognised and training opportunities	Support for training	Attitude towards team and team work	Teamwork & communication	Interdepartmental communication	Clean work environment	Support from team and seniors	Place for relaxing	Work-life Balance	Shift work	Energy for home duties	Motivation for work
Shift work	Correlation Coefficient	.073	-.060	.044	.137*	.088	.118*	.116*	.098	.242**	.215**	.101	.265**	1.000	.310**	-.069
	Sig. (2-tailed)	.199	.292	.438	.016	.125	.038	.042	.085	<.001	<.001	.076	<.001	.	<.001	.228
	N	308	308	308	306	304	308	308	308	308	308	308	308	308	308	308
Energy for home duties	Correlation Coefficient	.033	.013	.052	.167**	.019	.158**	.215**	.055	.106	.299**	.237**	.423**	.310**	1.000	-.086
	Sig. (2-tailed)	.550	.814	.355	.003	.732	.005	<.001	.327	.056	<.001	<.001	<.001	<.001	.	.125
	N	322	322	322	320	318	322	322	322	322	322	322	322	308	322	322
Motivation for work	Correlation Coefficient	.160**	.196**	.103	.009	.023	.053	-.052	-.081	.136*	.057	.074	.046	-.069	-.086	1.000
	Sig. (2-tailed)	.004	<.001	.064	.875	.686	.341	.354	.146	.014	.312	.184	.407	.228	.125	.
	N	322	322	322	320	318	322	322	322	322	322	322	322	308	322	322

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix 6: Turnitin report



MD final draft

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Appendix 7: Editing certificate

NERESHNEE GOVENDER COMMUNICATIONS (PTY) LTD

REGISTRATION NUMBER: 2016/369223/07
DR NERESHNEE GOVENDER (PhD)
neresh@ngcommunications.co.za
0847022553
WRITING PRACTITIONER • EDITOR • COPYWRITER • TRAINER

PhD-Management Sciences: Marketing (gender and media); *PG DIP - Higher Education - Academic Developers (Cum laude;)* M-Tech Public Relations; B-Tech Public Relations *(Cum laude)*; B-Tech Journalism *(Cum laude)*; *N-Dip Journalism*

30/01/2024

Michaelle Deonarain
CPUT
Student No. 223232165

RE: EDITING CERTIFICATE

FOCUS AREA: THE QUALITY OF WORK LIFE OF FRONTLINE HEALTHCARE WORKERS THAT AFFECT SERVICE DELIVERY AT SELECTED HOSPITALS IN SOUTH AFRICA

A thesis submitted in fulfilment of the requirements for the degree of

Doctor of Public Administration in the

Faculty of Management Sciences at the Cape Peninsula University of Technology

This serves to confirm that this research has been edited for clarity, language and layout.

Kind regards,

Nereshnee Govender (PhD)